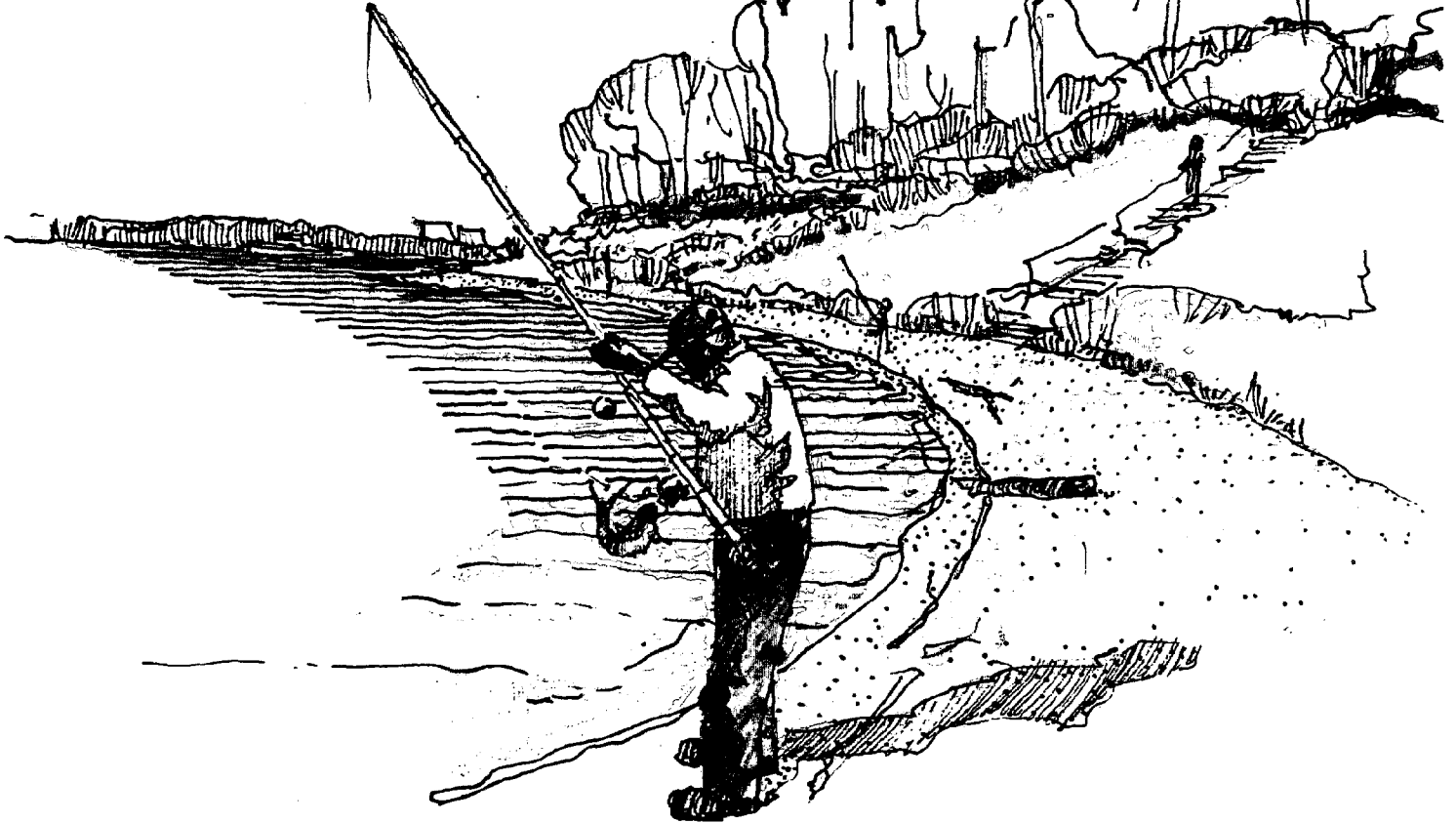


Final Product

VA Coastal Resources Mgt. Program

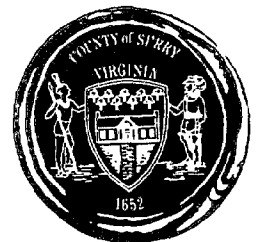
8/31/93



**SURRY HAS SOMETHING SPECIAL
BUT YOU CAN'T GET THERE FROM HERE**

WATERFRONT ACCESS & RECREATION PLAN

**SURRY
COUNTY**
VIRGINIA



EARTH DESIGN ASSOCIATES, INC.

ACKNOWLEDGEMENTS:

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LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE

NO75-8 P67 1993

List of Abbreviations

ADA	Americans with Disabilities Act
BMP	Best Management Practices
CBYCC	Chesapeake Bay Youth Conservation Corps
DPRR	Division of Planning and Recreation Resources
MLW	Mean Low Water
RMA	Resource Management Area
RPA	Resource Protection Area
RV	Recreation Vehicle
SEAS	Shoreline Erosion Advisory Service
SWMA	State Wildlife Management Area
VIMS	Virginia Institute of Marine Sciences
VMRC	Virginia Marine Resources Commission
VOF	Virginia Outdoors Fund

Glossary of Terms and Phrases

Dredging - The removal of mud or silt from the bottom of a body of water.

Flood Plain - All land areas which are subjected to inundation by waters of the one-hundred- (100) year flood.

Intertidal - Area on a shoreline between mean high water and mean low water.

Resource Management Area (RMA) - Lands which, if improperly used or developed, "have a potential for causing significant water quality degradation or for diminishing the functional value of the RPA."

Resource Protection Area (RPA) - Sensitive lands at or near shorelines that have "intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may cause significant degradation to the quality of state waters."

Subaqueous - Areas of land which are submerged in water.

Tidal Flat - Generally, a vegetated wetland.

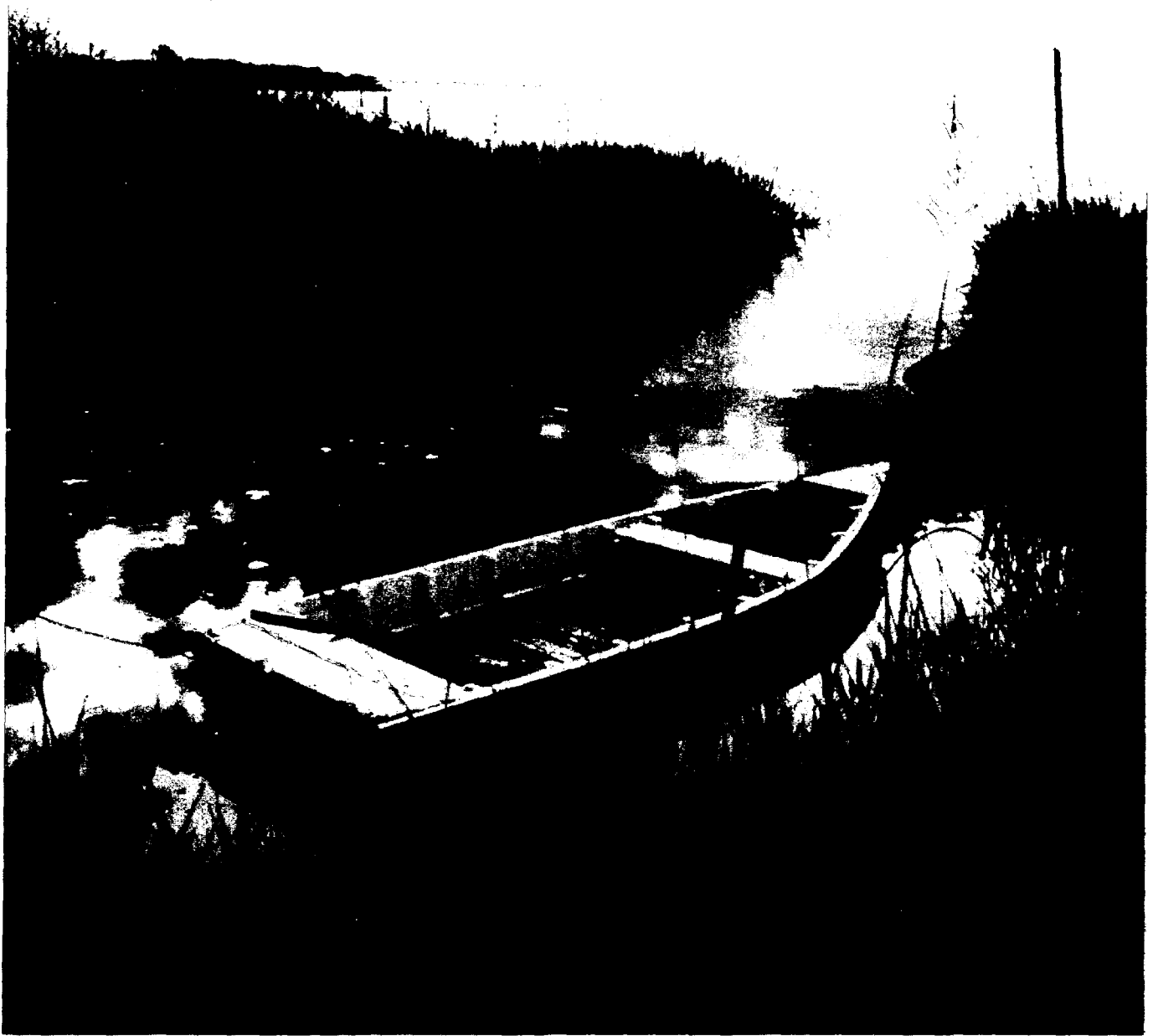
Tidal Waters - Waters which are affected by tides, especially in rivers. Areas of submerged lands which are affected by the tides.

Tidewater - The geographic area between the ocean and the Piedmont or fall line.

Wetland - Land areas which are flat or nearly flat and marshlike and are affected by tidal influences.

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I. INTRODUCTION



INTRODUCTION

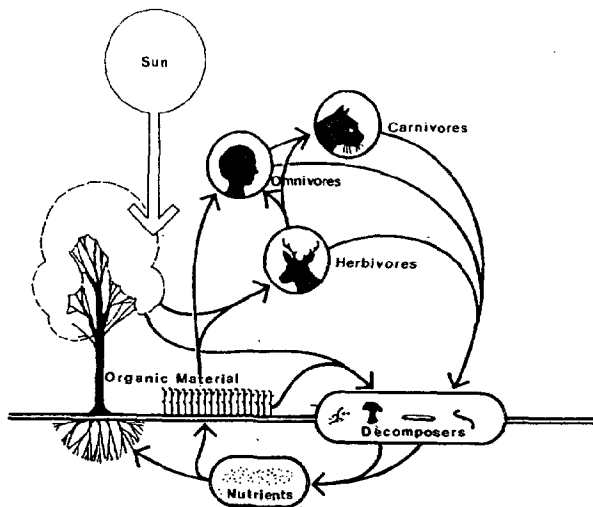
Rich in history, reaching back to the very beginning of this country, rich in natural heritage and beauty, and rich in its African, European and Native American cultural heritage, Surry County, as touted, is truly "something special." One very special aspect of Surry is the presence of the James River and its tributaries which present a wonderful recreational resource. Unfortunately, since the early settlers sailed over to the Surry side, this resource has become less and less accessible to the people of the area. And, today for most residents, you really "can't get there from here."

Fortunately, some insightful individuals in government have recognized these inadequacies and commissioned this study, which will guide the County in providing residents with the future opportunity of experiencing the river, much as the early settlers did, and enjoying other modern-day recreational opportunities that are only obtainable through water access.

The lack of access to the water is not unique to Surry County. In Virginia, less than one percent of the waterfront is publicly owned and accessible to State residents. In Surry County, the percentage is much higher; however, that does not translate into more accessibility, as is explained later.

Aside from its legal authority, when you consider the impact of waterfront recreation on the environment, this role is indeed an appropriate one.

As population grows, pressure on sensitive environmental resources increases and the threats of pollution and environmental degradation are on the rise, every action which has a potential effect on the environment must be planned to minimize its impact. Wherever possible we must create a relationship between land use and the environment which is in harmony and balance.



Because of the high value and very sensitive nature of wetlands, stream systems, estuaries and other water related environmental resources, planning is essential for uses such as recreational access, so they are truly environmentally compatible. Thus, creating a symbiotic relationship between the environment and facilities which meet the water-related recreational needs of Surry County residents has been the guiding principle in this planning effort.

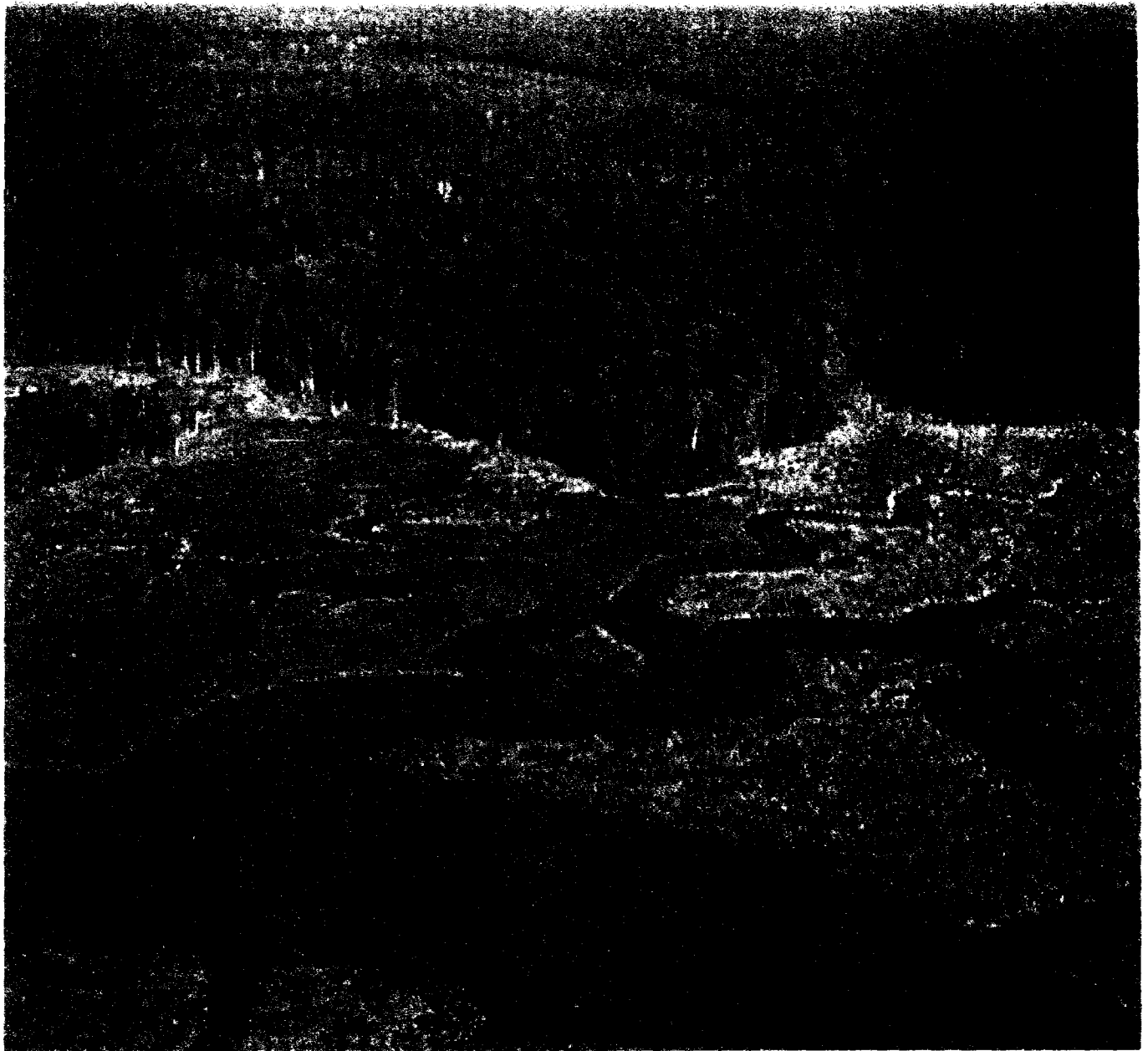
The plan has been developed as a strategic plan which identifies a wide variety and range of opportunities and strategies for pursuing these opportunities. Rather than focusing on specific sites which may or may not become available, the plan has identified many "opportunity areas" which, when the County establishes there is the need for a facility, the opportunity can be pursued. Simply stated, this study creates a context within which future decisions about waterfront recreational activities and facilities can be made.

The planning process began with gathering information about existing conditions including population, recreation, land use, road access, and inventories of existing historic, scenic, visual, and environmental resources. This information was analyzed and evaluated with an eye towards determining potential water related recreational activity areas and evaluating resource capability. Performance guidelines were then established and typical schematic plans prepared for guiding future planning. Finally, areas of opportunity were identified and strategies for implementation recommended.

In the early stages of the study an advisory committee of individuals representing recreational and planning interests in the County was appointed. The committee met periodically during the course of the study and gave direction to its development and content. At two important decision-making junctures, presentations were made to the County Planning Commission and input was received from individual commissioners as representatives of the citizens of Surry County.

The Plan was prepared with a matching grants from the Virginia Council on the Environment (COE). According to Executive Order Number Fifteen (90) issued by the Office of the Governor of the Commonwealth of Virginia, the COE has the legal responsibility of monitoring all state actions which affect coastal resources. In addition, the COE is the lead agency for the implementation of the Virginia Coastal Resources Management Program (VCRMP). The VCRP was created in response to the requirements of the Federal Coastal Zone Management Act (CZMA) which assists individual states with resource management improvement grants and other monies.

On January 21, 1993 The Plan was presented to, reviewed and unanimously accepted by the Surry County Board of Supervisors.



II. EXISTING CONDITIONS/ ANALYSIS

Population/ Demographics
Roadway/ Waterfront Proximity
Existing Waterfront Recreation
Land Use/ Ownership/ Zoning
Historical Resources
Scenic/ Visual Resources
Environmental Resources



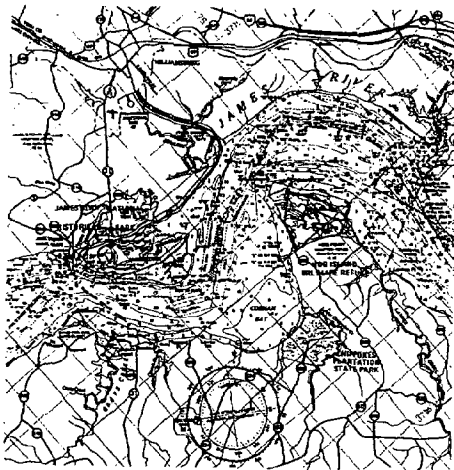
II. EXISTING CONDITIONS/ ANALYSIS

Population/ Demographics
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Historical Resources
Scenic/ Visual Resources
Environmental Resources

EXISTING CONDITIONS

Surry County is located in the southeastern quadrant of the state and encompasses 306 square miles. Physiographically, it is located in the tidewater province of Virginia midway between the Atlantic Ocean and the fall line. Approximately half of the county is in the James River/ Chesapeake Bay watershed. The other half drains into Blackwater Creek and eventually into the Chowan Basin and on to the Atlantic Ocean in North Carolina. Since the James River and its tributaries offer the greatest potential for water-related recreation-and also the greatest potential for environmental impact, the focus of this study is within the James River watershed.

Within this watershed there are approximately 75 miles of water frontage on the James and its tributaries. The terrain is level to generally rolling, and generally steepens when approaching waterways. The "high ground" ranges from 93 feet in the eastern end of the county to 120 feet in the western part. The low-lying areas are at sea level at the water's edge.



The River was the area's lifeblood in the colonial era, but in later years it has served to isolate and to protect Surry from the growth and development which has taken place in other areas of the state, including the north bank of the James. This is due largely to the absence of a direct highway link to the north shore, limiting highway transportation.

Although Surry enjoys most of the advantages and conveniences of Twentieth Century life, in some respects it has been "frozen in time" and its natural and historical heritage have not yet been seriously violated as they have in other areas of the state. Some would argue that this has caused economic hardships in the county, while others would be quick to point out that it has prevented the county from destroying its most precious resources. Regardless of which

viewpoint one chooses, the only relevant issue is management of the county's present-day resources and opportunities. In this study, waterfront recreation opportunities are the focus of attention.

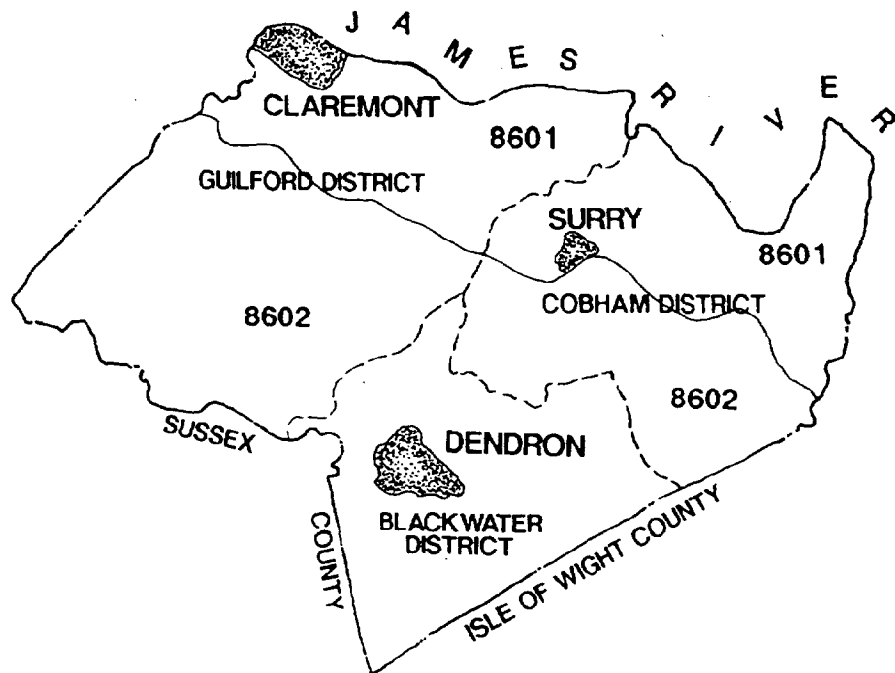
In this section, existing conditions which have a bearing on waterfront recreation are recorded and analyzed. These conditions and their general significance are as follows:

- **Population and demographics**
Analyze number and distribution of people in the county to determine where facilities should be located.
- **Roadway waterfront proximity**
Determine where the waterfront is most easily reached.
- **Existing waterfront recreation** Identify type and location of existing activities and determine other needs.
- **Land Use/ Ownership/ Zoning**
Determine how land is currently used, owned, and zoned to evaluate potential for acquisition and/ or use.
- **Historic Resource**
Identify historic resources for recreational use and their protection.
- **Scenic/ Visual Resources**
Analyze these resources for potential use, preservation and improvement.
- **Environmental Resources**
Record and analyze for recreational potential for their protection.

POPULATION/ DEMOGRAPHICS

Over the years since post-colonial times, the population of Surry County has remained more or less constant. In 1790, the population was 6227; in 1980, 6046; and in 1990, 6145. Projected population figures indicate a very modest growth of slightly less than one-half of one percent per year over the next 20 years. Some growth will occur county-wide, but most is expected to be concentrated around the existing incorporated towns of Surry, Claremont and Dendron.

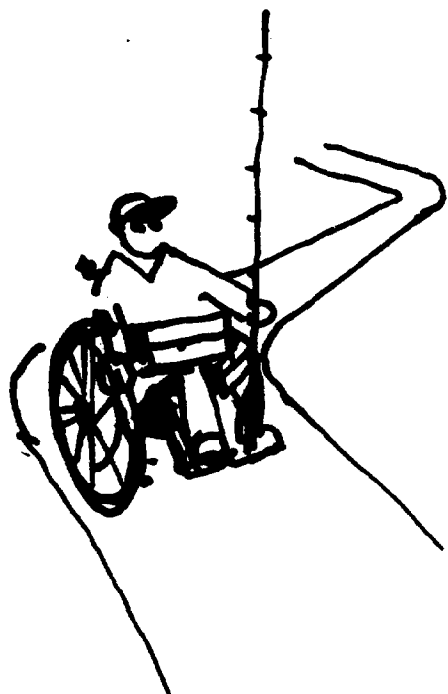
	1990 Census	2000 Projected	2010 Projected
Total Population	6145	6401	6700
Tract 8601 (Incl. Surry & Claremont)	2872	2992	3132
Tract 8602 (Incl. Dendron)	3273	3409	3568



The 1980 population data contained in the Surry County Comprehensive plan indicates a fairly even geographic distribution of people within the county. While only very general information is available from the 1990 census, it seems to confirm this as well. This means that water-related activities and facilities should be as evenly distributed as possible along the river and its tributaries; and that major facilities should be as centrally located and accessible as possible. Once the County's recreation user survey is completed, the population and demographic information should be analyzed to further determine more specifically where facilities are needed.

ACCESSIBILITY

To ensure that the County government is serving all of its citizens, the planning of waterfront-related recreational facilities must include access by the alternately abled.

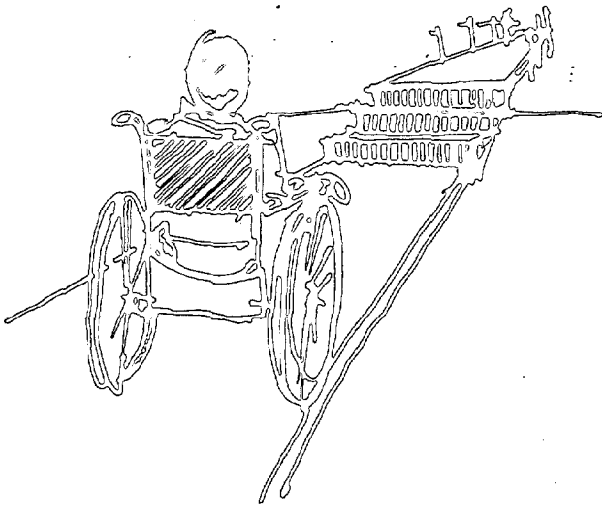


The applicable standards of the Americans With Disabilities Act (ADA) must be incorporated into any recreational development plans. The ADA is the most recent of the laws concerning alternative access and was developed to guarantee all citizens of the United States equal access to all public accommodations, which include: parks, zoos, and amusements parks as outlined in Title III Regulations. This affects any facilities developed under this study. In essence, the Act requires that all goods and services are provided in an integrated setting so as to eliminate all unnecessary eligibility standards, rules, architectural barriers and all other situations that deny equal access to individuals with disabilities (except those alterations or designs which would inhibit the required operation of the public facility).

ADA
Summary of Title III Highlights

Public accommodations must:

- Provide goods and services in an integrated setting.
- Eliminate unnecessary eligibility standards or rules that deny individuals with disabilities an equal opportunity to enjoy the goods and services of a place of public accommodation.
- Make reasonable modifications in policies, practices and procedures that deny equal access to individuals with disabilities, unless fundamentally altering the nature of the goods and services provided.
- Remove architectural and structural communication barriers in existing facilities where readily achievable.
- Provide alternative measures when removal of barriers is not readily achievable.
- Maintain access to all features of facilities and equipment.
- Design and construct new facilities, and, when undertaking alterations, alter existing facilities in accordance with the ADA accessibility guidelines issued by the Architectural and Transportation Barriers Compliance Board and incorporated in the final Dept. of Justice Title III Regulation.



Eligibility for goods and services.

- A public accommodation may not use eligibility requirements that exclude or segregate individuals with disabilities unless the requirements are "necessary" for the operation of the public accommodation.

The ADA is intended to be comprehensive in limiting restrictions placed upon all individuals with disabilities.

Roadway/ Waterfront Proximity

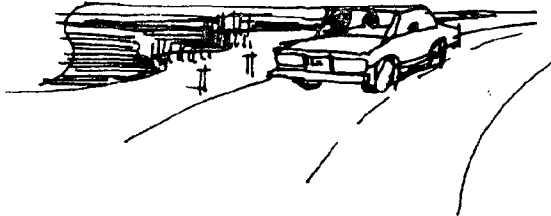
One factor to be considered in evaluating recreational access to the water is the distance from public roads to water bodies with recreational potential. Obviously, road-building is expensive and construction of vehicular access to a facility is an added cost. Therefore, it would be prudent to look for opportunities which are on or close to existing public roads.

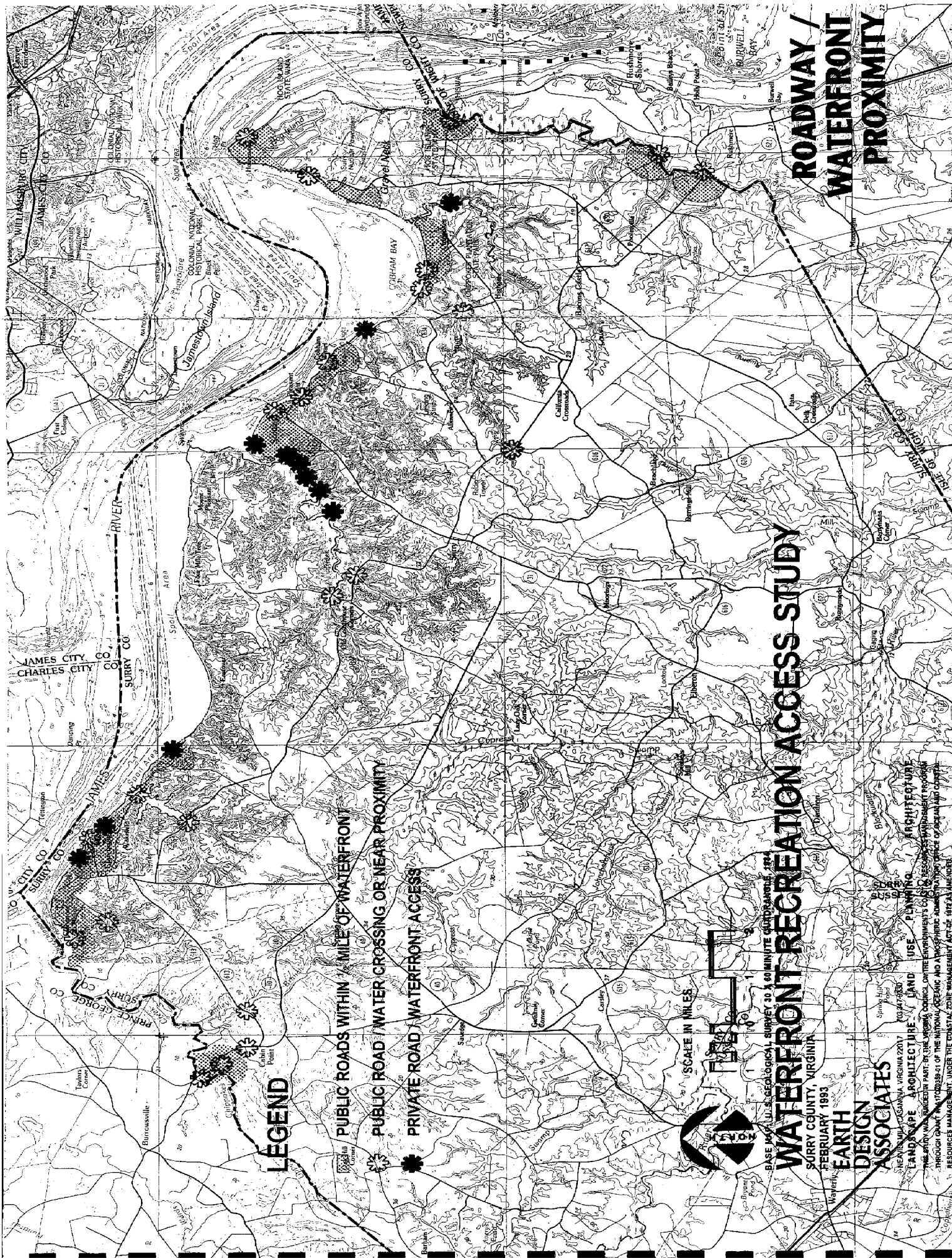
The roads in Surry appear well distributed and provide convenient access to almost any place in the County.

However, there are very few places where roads actually reach the water or cross a water body. Only one such location, Scotland Wharf, has public road access to the James River. Most of the existing roads which lead directly to the waterfront are private roads within waterfront vacation communities, such as Claremont Beach, Guilford Heights and Mount Ivy Beach.

No location should be ruled out because it isn't close to a public road, since funding for access might be available from other than county sources. Of course, different kinds of roads with different levels of cost are needed to serve different types of water-related recreational facilities.

For purposes of this study, the following map identifies public roads that are within one-quarter-mile of water bodies; public roads that are in close proximity to water bodies, and private homeowner association roads that come in contact with water bodies. Generally speaking, these situations are thought to be the most accessible areas in terms of existing roads.





LEGEND

- PUBLIC ROADS WITHIN 1/4 MILE OF WATERFRONT
- PUBLIC ROAD / WATER CROSSING OR NEAR PROXIMITY
- PRIVATE ROAD / WATERFRONT ACCESS



SCALE IN MILES

WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA
FEBRUARY 1993

EARTH

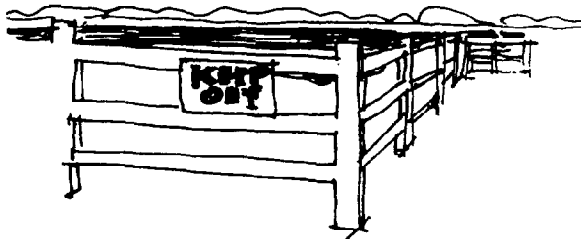
DESIGN
ASSOCIATES

NEARBY VIRGINIA VIRGINIA 22017
LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE
THIS STUDY WAS COMPLETED PART OF THE VIRGINIA COASTAL ZONE RECREATION PROGRAM
THROUGH GRANT #000000001 OF THE NATIONAL COASTAL ZONE RECREATION PROGRAM
RESOURCES MANAGEMENT

ROADWAY / WATERFRONT PROXIMITY

EXISTING WATERFRONT RECREATION

One of the main reasons Surry County is "something special" is that it contains the James River and its tributaries, totaling over 75 miles of river and creek frontage are in the County. As is true in most Virginia tidewater localities, this potentially wonderful resource has patterns of land use and ownership that render the waterfront largely inaccessible to its citizens.



A comparatively large amount of waterfront is publicly owned by the State, but the type of property and the restrictions placed upon it make it unable to fulfill many of the waterfront recreational needs of County residents.

None of the waterfront is owned by the County government. Furthermore, it is truly ironic that most of the existing waterfront recreational opportunity areas along the James River are not owned by County residents, but are vacation properties owned by people from outside of the County.

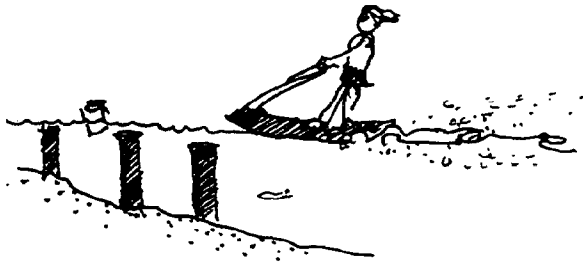
In addition to a general lack of access and waterfront recreational opportunities, another problem is that the public, by and large, is unaware of what is available and there is a general lack of programs to take advantage of existing opportunities.

The following is a description of existing waterfront recreation in Surry County, first listed by kind of activity and then by area:

EXISTING WATERFRONT RECREATIONAL ACTIVITIES:

- **Boating.** As would be expected, boating is a popular activity in the County. One percent of the population is estimated to own boats and, of course, this will grow as boating opportunities become more available.

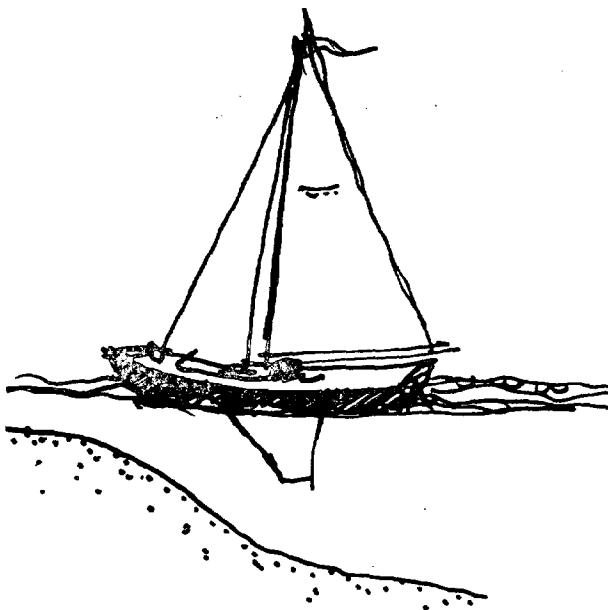




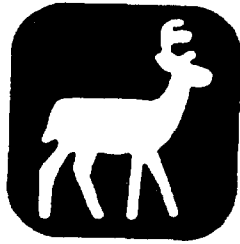
Streams leading into the James River are ideal for canoes and small jon boats. While the areas of the James River which are well offshore are very good for larger power boats and sailboats.

The James riverfront in the County is considered to be "old" in that it has been settled and used for several hundred years. This has resulted in the remains of old docks, piers, wharves, stumps, etc. which present boating hazards, in particular to high-speed power boats and jet skis. These activities are becoming more and more popular and, therefore, any boating areas and activities must take these hazards into account.

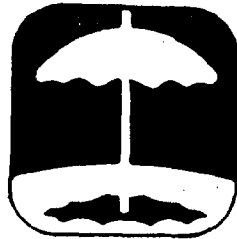
The Virginia Department of Game and Inland Fisheries lists 15 boat access points in its inventory of the County. Of these, only four ramps are considered to be for public use: Claremont Beach, Grey's Creek Marina, Crouch Creek and Lawnes Creek; only one is publicly owned. This equates to very limited local boat access to the waters of the County.



The deeper waters of the James River are good for sailing, but facilities for docking and keeping deep draft sailboats are nonexistent in Surry County. Some shallow draft sailboats are kept at the Grey's Creek Marina. Although Grey's Creek is deep enough for sailboats, sediments at its mouth severely limit sailboat access. Accommodation of deeper draft sailboats will involve dredging at the mouths of the creeks. This may or may not be permitted, and can only be determined by going through the permitting process (see section on Permitting). The possibility of keypone contamination in the sediments which need to be dredged is another consideration. Ironically, its presence would make dredging operations less expensive, since keypone-contaminated dredge material will have to be disposed of in the water rather than hauled to an upland site as would "clean" dredge material.



- **Nature Study.** The opportunity for nature study abounds in Surry County; however, actual participation in this activity is difficult to assess. Organized nature study and environmental programs are part of overall programs at Chippokes Plantation State Park. Although not an organized program, nature study accounts for much of the use of Hog Island SWMA.



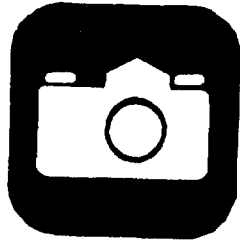
- **Beach Bathing.** Numerous bathing beaches of varying quality are located along the James River in the County. These include Mount Ivy Beach, Scotland, Sunny Meadow Beach, Guilford Heights Beach and Claremont Beach. The major limiting factor for county-wide beach bathing is that the beaches are all privately owned and not open to the general public. Most are owned by community homeowner associations in vacation communities, and use is limited to the property owners and their guests.

Section 16 of the County Real Property Identification Map notes at Scotland "PB2-40 (1889) Beach reserved for public use." Further legal research is needed to determine if this beach is indeed available for public use.

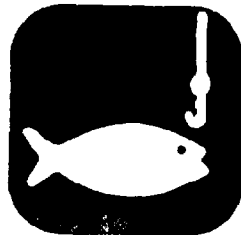


- **Waterfront Tourist Attractions.** There are virtually no activities or facilities in Surry County which could be considered waterfront tourist attractions with the possible exception of the Scotland/Jamestown Ferry. However, this is an attraction by default rather than design, as its major function is transportation.

Several tourist destinations happen to be on the waterfront including Chippokes Plantation State Park, Smith Fort Plantation and several other historic properties. Hog Island could be considered a seasonal waterfront tourist attraction during waterfowl migration. To say the least, the tourist visitation potential of Surry County's waterfront is seriously neglected.



- **Sightseeing.** Surry is rich in scenery and visual quality. Like nature study, sightseeing is an unknown quantity in the County. For County residents, enjoying the quality of the visual environment is a part of the overall quality of life which enriches their lives on an everyday basis, but generally goes unnoticed. Visitors to the County undoubtedly spend much of their time enjoying the natural scenery and historic sights.
- **Fishing.** Fishing is very popular in Surry County, despite the relatively inaccessible nature of the waterfront. Most fishing is by boat on the James River and major creeks. The majority of fish caught in the James and tidal tributaries year round are yellow and "mud" catfish, large-mouth bass, bluegill and grindal, while shad and rockfish are taken on a seasonal basis. The upper ends of the creeks are considered to be very good for large-mouth bass, crappie and yellow perch, while pickerel can be taken in the freshwater part of Upper Chippokes Creek. From Scotland downstream, the James River is often too brackish for large-mouth bass, particularly in the late summer months.



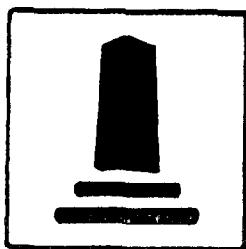
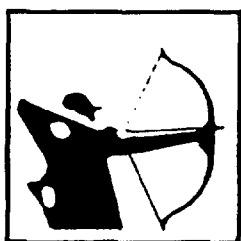
Bank fishing usually takes place on private property, or on road crossings of streams, despite laws and signs prohibiting this activity. Public access points where bank fishing is allowed include: the beach in front of Chippokes Plantation State Park visitors center, the water frontage at Hog Island SWMA, and, to a very limited extent, at the Lawnes Creek Boat Ramp.

A popular fishing activity in the County has been the herring run between mid-March and mid-May which lasts for a period of 30-60 days. The fish are caught by dip net in shallow creeks primarily at two locations where Upper Chippokes Creek

and one of its unnamed branches crosses Route 10. This activity requires trespassing on private property, although, according to the local game warden, this has not been a problem in the past. Another dipping spot is the out-fall canal from Sunken Meadow Pond at Sunny Meadow Beach.

Crabbing is a popular activity up and down the River despite the limited number of access points and the need to trespass on private property.

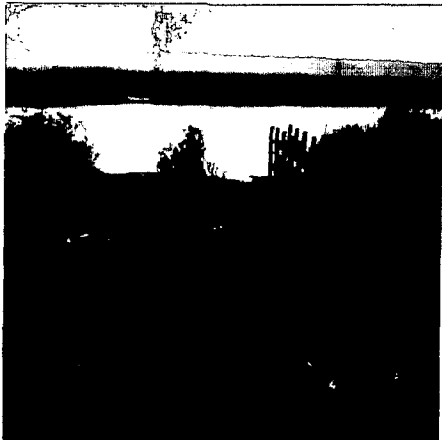
Shell fishing is banned on the James River from Hog Island upstream because of human waste contamination from municipalities to the west.



- **Hunting.** Waterfowl hunting is a popular water-related activity as evidenced by the number of blinds located up and down the creeks. Bow and arrow hunting of waterfowl and fish is allowed on a controlled basis within the Hog Island SWMA. Access for water-related hunting is not thought to be a problem.
- **Historical Interpretation.** Although historical markers abound in the County, there is a general lack of interpretation of the waterfront and its historical importance. Once again, Chippokes Plantation State Park leads the way with an excellent exhibit and visual audio program explaining early settlements and river transportation. However, the Chippokes exhibit and the few historical markers which do focus on waterfront sites are virtually the only water-related historical interpretation in the County. Many of the wharf ruins, etc. generate interest and curiosity which goes largely unanswered.

EXISTING RECREATION BY AREA:

The following list indicates which recreation facilities are currently available at specific areas in the county.



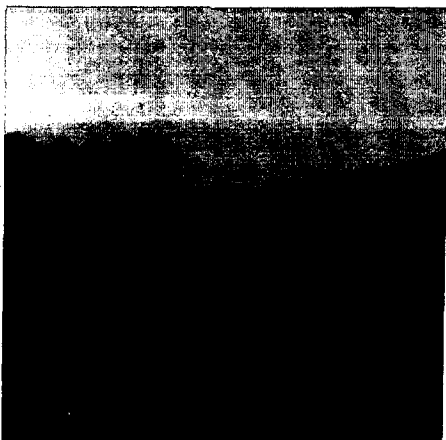
Lawnes Creek Boat Ramp

- **Lawnes Creek Boat Ramp:** The Lawnes Creek Boat Ramp is owned and operated by the Virginia Department of Game and Inland Fisheries, and is the only publicly owned ramp in the County. It has one ramp and a small pier suitable for launching small-to medium-sized boats on trailers and approximately one-half acre of parking.

A combination of conditions make this a facility of limited use. First, located at the end of a long, poorly maintained, right-of-way it requires a 4-wheel drive vehicle under wet conditions. Being at the end of a long right-of-way, the ramp and parking area are difficult to police, thus creating security problems, including vandalism and refuse dumping.

Ruts eroded in the lane for backing trailers makes launching more difficult. According to users, the ramp is only useful at high tide because of insufficient water depth at other times.

The mouth of Lawnes Creek at the James River is also silted, limiting the size and times that boats can get in and out. The rough water, which often characterizes the James River in the stretch from the point of Hog Island south up to Burwell Bay, further limits the usefulness of any boat-launching facility on Lawnes Creek.



Hog Island SWMA

- **Hog Island Wildlife Management Area.** This area offers a variety of water-related recreational opportunities which include sightseeing, nature study, hiking, hunting, bank fishing and hand-launch boating. Limitations include its remote location, walking distances for hand-launch boats and bank fishing. Summertime mosquito infestations also keep people away.

- **VEPCO Canal.** Currently, those who obtain permission, mainly VEPCO personnel, can fish the banks of the outlet canal from the Surry power plant. Fishing is good here because of the warmth of the water. There is also a boat launching facility farther down the canal, but it is not open to the public. It is thought that this location is not good for public access because of dangerous currents in the canal.

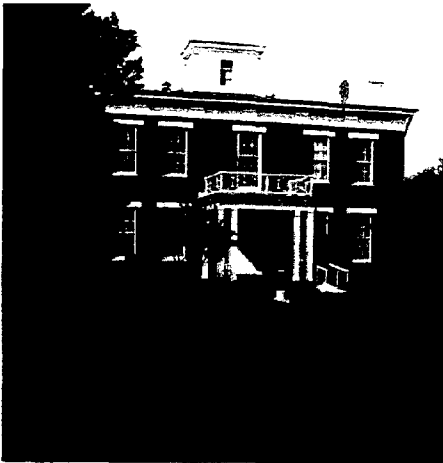
- **Bailey's Trailer Park Boat Ramp**

This is a small boat ramp, located on the east side of Chippokes Creek. It is privately owned thus not open to the public.

- **Chippokes Plantation State Park.** Although its predominant theme and resource management plan is not water-related recreation per se, Chippokes provides by far more waterfront recreational opportunities to the public than any other facility within the County. The riverfront below the visitor's center is a favorite bank fishing spot where the primary catch is catfish, although all other game fish found in the river are taken here from time to time.

The visitor's center offers an excellent multi-media presentation of the history and use of the river which accompanies a museum exhibit of early plantation life. There is a waterfront trail along the river at College Creek which provides hiking, cycling and sightseeing opportunities.

The park's property on Chippokes Creek is used in various nature study programs and the park is currently planning to build a floating pier for canoe launching as part of its nature study programs. The pier will be remotely located in the park which will not make it a feasible spot for general canoe launching in the County.



Chippokes Manor House



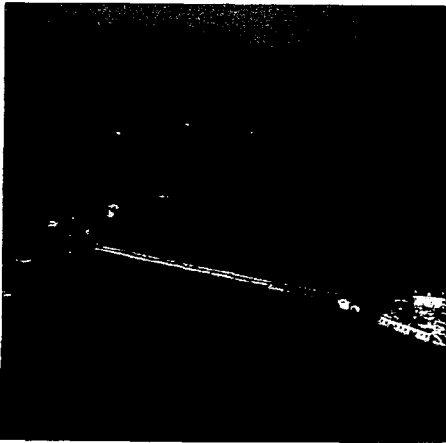
Chippokes Beach



Crouch Creek Piers

- **Mount Ivy Beach.** Mount Ivy Beach is a privately owned recreational area for the exclusive use of residents of the Mount Ivy Subdivision. There is road access to the beach which is approximately 50 feet deep.
- **Crouch Creek.** The mouth of Crouch Creek appears to be a favorite fishing and crabbing spot in the County. Although privately owned, it appears to be used by the public. To the south of the road is a small marina that was previously a fish market and is currently falling into disrepair. Here, there is a boat ramp which can be used by the public for a fee, and a series of small piers where boats tie up. Here is one of the few places in the County where parking is available close to the water. However only small boats can go from south of the roadway to the river because shallow water and the low bridge clearance restrict larger craft.

On the north side of the roadway bank fishing appears to be quite popular; however, it is necessary to trespass on private property to fish from this area.



Scotland Wharf

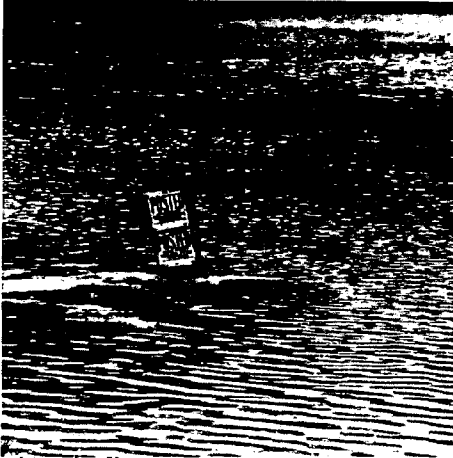
- **Scotland Wharf.** Although it is purely coincidental, the Jamestown/Scotland Ferry does provide recreation, particularly for tourists, as well as transportation between the north and south banks of the River.
- As stated earlier, there is some indication of public use on the County Tax Maps but the status is unknown.
- **Three Sisters Trailer Park.** A small, privately owned boat ramp is located within this trailer park, but it is not for public use.

- **Grey's Creek Heights.** Waterfront facilities at Grey's Creek Heights are owned by a group of lot owners in the Grey's Creek Heights Subdivision. It contains a boat ramp and a pier with about ten slips for medium-sized boats. There is a good maneuvering area for turning boat trailers. Also, the access road into the facility is quite good and except for being on the inside of the bend in Grey's Creek, it would appear to be one of the better marina locations in the county.

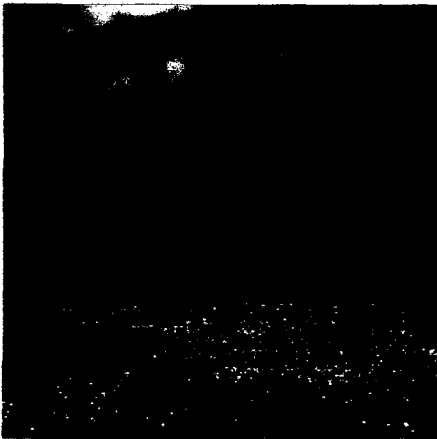
- **Grey's Creek Marina.** Although it is seriously run down, this is the only commercial marina and water recreation facility in Surry County. At the time of this study, the marina was not in operation and was undergoing limited repairs. One can only assume that it will be back in business.

The marina has a boat ramp, temporary docking facilities, gasoline pumps and approximately 26 permanent slips. The access road into the facility is very steep and not well maintained. Room for maneuvering and parking is also quite limited.

- **Colonial National Park at Swanns Point.** Although this park has beaches, wonderful scenery and high-quality natural areas, it is landlocked by privately owned lands and is inaccessible except by way of the river. One can only speculate that boaters occasionally use this park land for recreational purposes.
- **PIPSICO.** PIPSICO is a 916-acre tract of land owned by the Boy Scouts and is used for camp related recreational activities.
- **Camp Chanco .** Camp Chanco is a 125-acre tract of land owned by the Episcopal Diocese of Virginia operated as a camp with camp-related waterfront recreational activities.



Sunken Meadow Pond



Sloop Point

- **Eastover.** Eastover is a 110-acre property owned by the Baptist Church and operated as a camp with camp-related waterfront recreational activities.
- **Gulford Heights Beach.** This is a small waterfront recreation area located in the community of Guilford Heights for the exclusive use of Guilford Heights residents and guests. Facilities include a narrow bathing beach, a boat ramp which is limited to use at high tide, picnicking area and parking lot.
- **Sunny Meadow Beach.** Sunny Meadow Beach is the best natural opportunity for a bathing beach in Surry County. Sun bathing, picnicking, and pick-up games are available for trailer owners who rent parking spaces. A boat-launching ramp is available to the public for a fee.
- **Sunken Meadow Pond.** On the south side of Route 626, opposite Sunny Meadow Beach, is Sunken Meadow Pond where there is a small fishing/ john boat concession and bank fishing for a fee.
- **Sloop Point .** Sloop Point is a small gathering spot located at a cul-de-sac at the end of Route 220. Though a sign on the beach indicates that it is for residents of Claremont only, it would appear to be used by the public for picnicking, sun bathing and sightseeing. A small parcel of property, thought to be the parking area, is owned by the town, while the beach and waterfront are owned by the community homeowner's association.

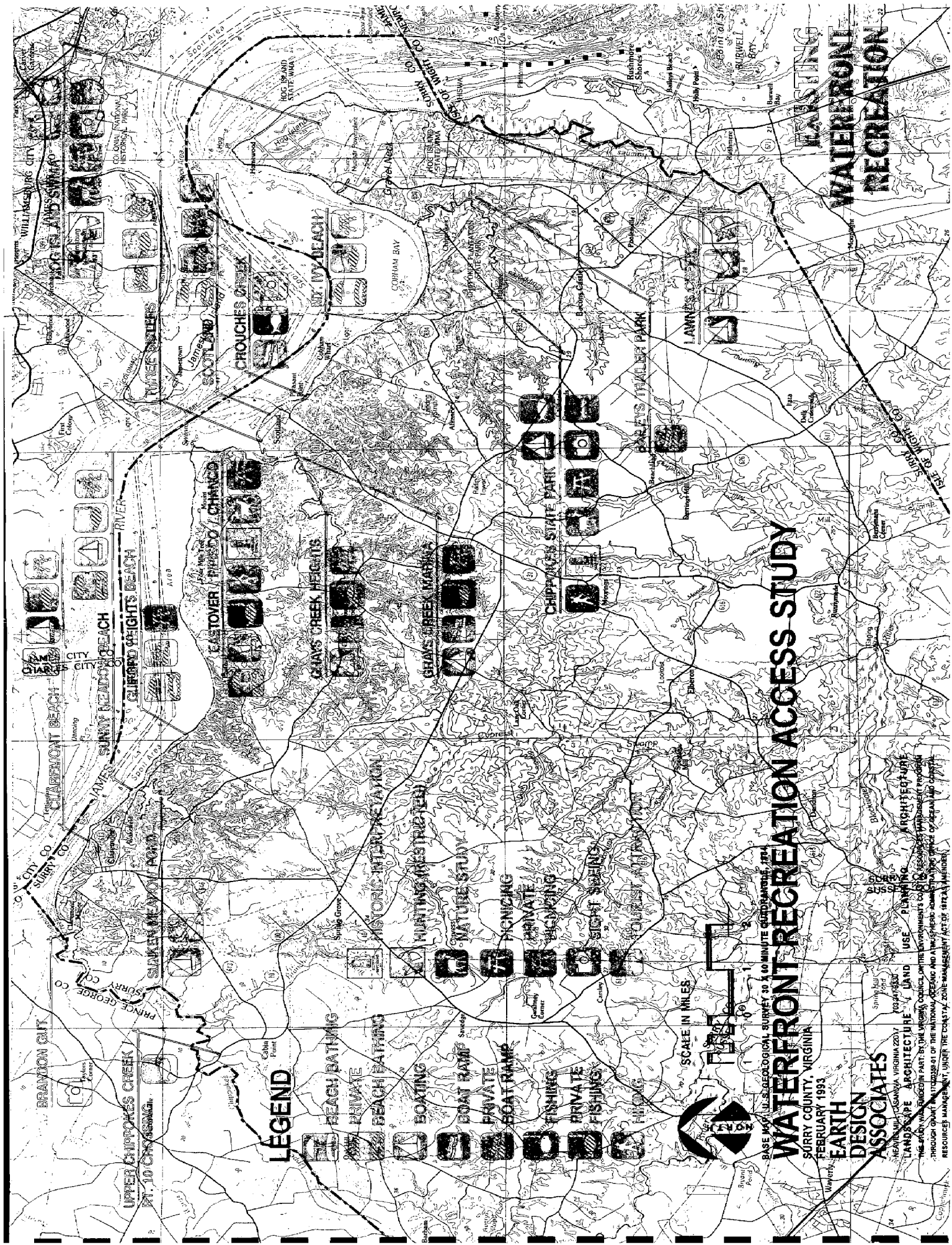


Brandon Gut

- **Claremont Beach.** Claremont Beach is a private, mostly vacation-home community with perhaps the second-best natural area for a bathing beach in the County. The beach area is privately owned and for the exclusive use of owners and their guests. Here there is a boat ramp and a small pier which can be used by the public for a fee. However, without prior knowledge of being able to use the boat ramp, the "Private," "No Trespassing" signs entering the community discourage general public use of the ramp.
- **Brandon Gut.** The drive to the mouth of Brandon Gut is one of the most scenic in the County and is obviously used for sightseeing. It is also one of the few areas in the region where road access allows close viewing of a high quality natural area. This can be of great potential for access by the handicapped and disabled.

Unfortunately, the scenic drive and turnaround area are the subject of a disagreement between the Town of Claremont and the adjacent land owner. The appearance of the turnaround is marred by the presence of a tall chain link fence constructed by the adjacent owner. Local residents say the area used to have a fishing pier and another pier where boats tied up. However, these no longer exist and actual access to the water is not possible because of the fence.

- **Upper Chippokes Creek/Route 10 Crossing.** As mentioned earlier, this is a favorite spot for dip net herring fishing.



LEGEND

- BEACH BATHING
- PRIVATE BEACH BATHING
- BOATING
- BOAT RAMP
- PRIVATE BOAT RAMP
- FISHING
- PRIVATE FISHING
- HIKING
- BEACH BATHING
- PRIVATE BEACH BATHING
- BOATING
- BOAT RAMP
- PRIVATE BOAT RAMP
- FISHING
- PRIVATE FISHING
- HIKING

SCALE IN MILES



BASE MAP: U.S. GEOLOGICAL SURVEY 30' x 60' MINUTE QUAD 2247-10-1

WATERFRONT RECREATION ACCESS STUDY

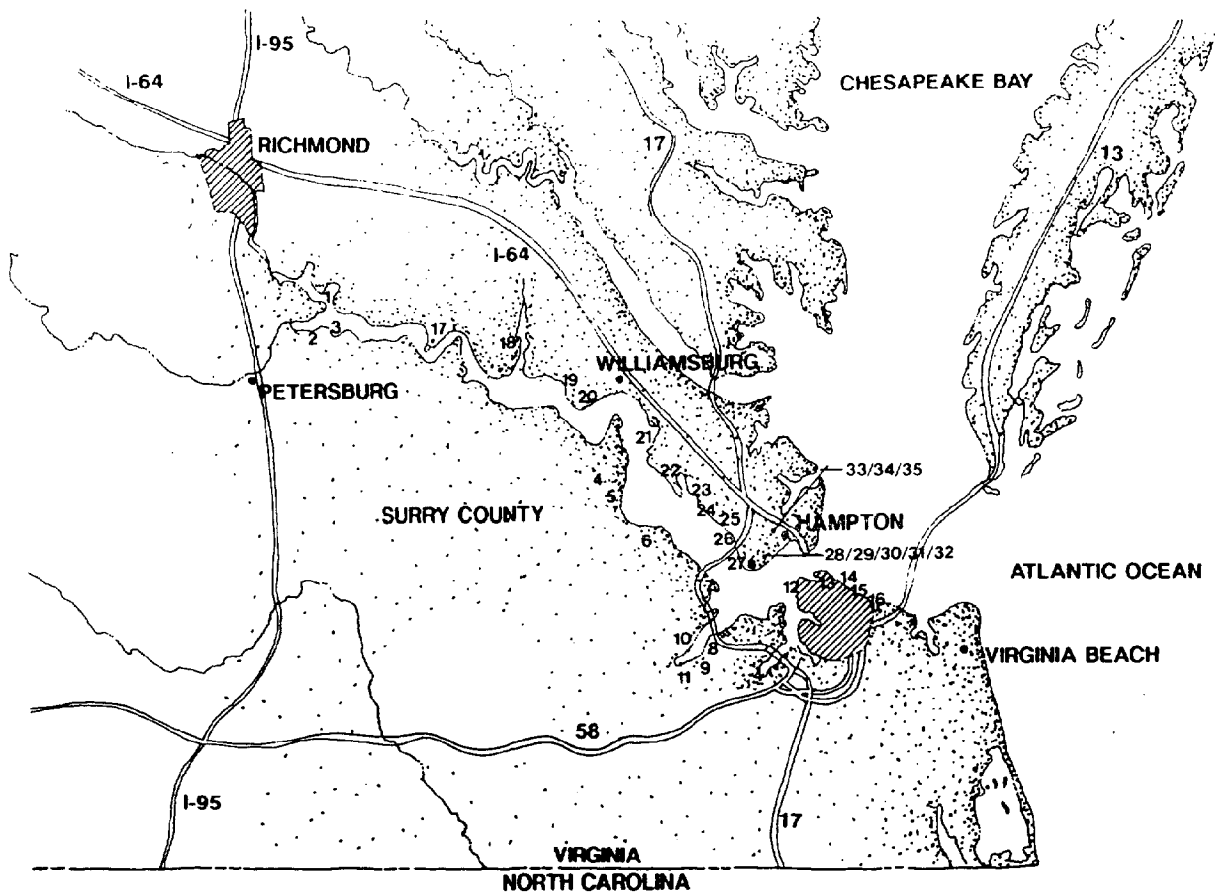
SURRY COUNTY, VIRGINIA
FEBRUARY 1993

EARTH

DESIGN ASSOCIATES

HEAVY BUILDING, VIRGINIA 22017
LANDSCAPE ARCHITECTURE
PLANNING
ARCHITECTURE
THE FIRM HAS BEEN IN THE BUSINESS OF PROVIDING ARCHITECTURAL, ENGINEERING, AND PLANNING SERVICES TO THE PUBLIC SINCE 1960. IT IS A MEMBER OF THE NATIONAL ASSOCIATION OF ARCHITECTS AND ENGINEERS.

EXISTING WATERFRONT RECREATION



Existing Regional Waterfront Recreational Facilities on The James River

The following is a list of waterfront recreation opportunities along the James River which are outside the County but within a reasonable driving distance. They are divided into North and South of the James with those to the South being obviously much more accessible to county residents.

South of James River

1. Presquile National Wildlife Refuge
Hiking; nature study; limited hunting
2. Hopewell Yacht Club
Large parking lot; boat launch ramp; dock; fuel.

3. Petersburg National Historical Park / City Point Unit
Large parking lot; pier or bank fishing; swimming beach; hiking; nature study; restrooms; historical site.
4. Burnt Mill Bridge
Shoulder parking; pier or bank fishing.
5. Tyler's Beach Ramp
Limited parking lot; boat launch ramp.
6. Fort Boykin Park
Large parking lot; pier or bank fishing; swimming beach; picnicking.
7. Ragged Island WMA
Large parking lot; pier or bank fishing; hiking; nature study; picnicking.
8. Bennetts Creek Park
Large parking lot; boat launch ramp; pier or bank fishing; hiking; nature study; picnicking; restrooms; shelters.
9. Sleepy Hole Park
Limited parking lot; pier or bank fishing; hiking; nature study.
10. Lone Star Lakes Park
Limited parking lot; hiking; nature study; picnicking; restrooms.
11. Nansemond NWR
Nature study; Restricted Use.
12. Willoughby Landing
Large parking lot; boat launch ramp; pier or bank fishing; restrooms.
13. Captain's Quarters Park
Limited parking lot, car top boat only; pier or bank fishing; swimming beach; nature study; picnicking; restrooms.
14. Beach Accessways
Shoulder parking; pier or bank fishing; swimming beach; hiking; nature study.
15. Sarah Constant Park and Beach
Limited parking lot; pier or bank fishing; swimming beach; hiking; nature study; picnicking; restrooms; concessions.
16. Community Beach West
Large parking lot; swimming beach; hiking; lifeguard.

North of James River

17. Kittewan Refuge
Nature study.
18. Chickahominy WMA
Limited parking lot; boat launch; pier or bank fishing; hiking; nature study; picnicking; handicapped access; camping; horseback riding; dock.
19. Jamestown Festival Park
Large parking lot; car-top boat only; pier or bank fishing; nature study; picnicking; handicapped access; historic site; shelters; food.
20. Colonial National Historical Park
Large parking lot; hiking; nature study; picnicking; restrooms; handicapped access; bike path; ringfield picnic area; interpretation center.
21. Goose Island Refuge
Shoulder parking; large parking lot; boat launch ramp; hiking; nature study; restricted use.
22. Denbigh Park Boat Ramp
Large parking lot; boat launch ramp; pier or bank fishing; nature study; restrooms; handicapped access; dock; crabbing.
23. Deep Creek City Pier
Limited parking lot; boat launch ramp; handicapped access; dock.
24. Lion's Bridge Beach
Shoulder parking; car-top boat only; pier or bank fishing; swimming beach.
25. Hilton Fishing Pier and Beach
Limited parking lot; pier or bank fishing; swimming beach; handicapped access; playground.
26. Huntington Park
Large parking lot; pier or bank fishing; swimming beach; hiking; nature study; picnicking; restrooms; handicapped access; museum; playground; tennis; shelters; concessions.
27. Christopher Newport Park
Limited parking lot; nature study; picnicking; historical site.

28. Seafood Industrial Park
Limited parking lot; boat launch ramp; marina; fuel; concessions.
29. King-Lincoln Park
Large parking lot; pier or bank fishing; swimming beach; picnicking; restrooms; handicapped access; stage; playground; tennis; basketball; shelters.
30. Anderson Park
Large parking lot; boat launch ramp; pier or bank fishing; swimming beach; hiking; picnicking; restrooms; handicapped access; stage; playground; tennis; basketball; shelters.
31. Peterson Yacht Basin
Large parking lot; pier or bank fishing; picnicking; handicapped access.
32. Monitor-Merrimac Overlook Park
Large parking lot; pier or bank fishing; swimming beach; nature study; picnicking; handicapped access; historic battle site.
33. Sunset Boat Ramp
Large parking lot; boat launch ramp; handicapped access; dock.
34. Visitor's Center
Pier or bank fishing; restrooms; Fort Wool boat tour; boat docking fee.
35. Mill Point Park
Shoulder parking; picnicking; restrooms; handicapped access; stage; cultural events.

* This information derived from the "Chesapeake Bay and Susquehanna River Public Access Guide" published by The Commonwealth of Virginia, 1989.

HISTORIC RESOURCES

Introduction

Surry County was formed in 1652 from James City County. Prior to its formation as a county, the "Surry side" of the river was an integral part of life for Jamestown settlers. Settlements on the south side of the river were known as the "plantations across the water" and in 1619 the Governor of Virginia included the early settlements in Surry as part of the "bound and limits" of Jamestown. The area was referred to as Surrey by the settlers because Jamestown was a miniature London to them and in London, the area south of the River Thames was called Surrey. The "e" was dropped from the name when the county was formed.



Illustration by - John White



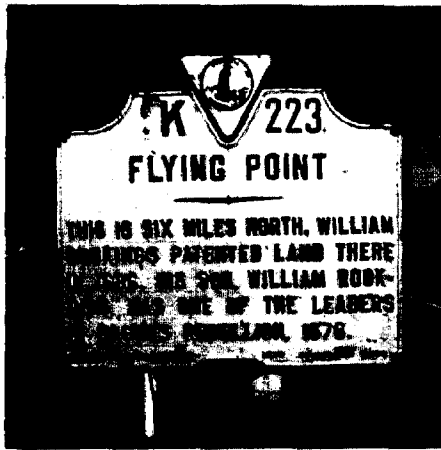
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From Captain John Smith's Map of Virginia

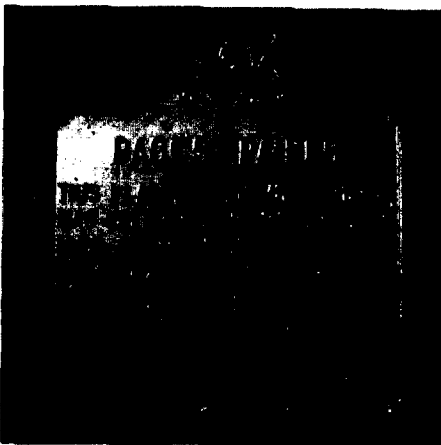
The presence of the river and the fertile soils of what is now Surry County proved desirable to the Indians who, for many years prior to the coming of the early colonists, had enjoyed life here. In 1609, Captain John Smith built a fort, now referred to as Smith's Fort Plantation, is on Grey's Creek just north of what is now the town of Surry. By 1632, 64 settlers were living in the area, 31 of them on Hog Island.

The land around Smith's Fort was a gift from Indian Chief Powhattan to Thomas Rolf, the son of his daughter, Pocahontas. In 1652, Thomas Warren built a house on this land which still stands today and is known as the Rolf - Warren House.

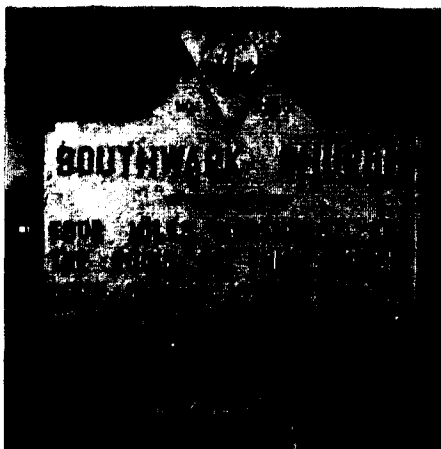
Further attesting to the historical importance of Surry is Bacon's Castle, built by Arthur Allen in 1660. It derives its name from Bacon's Rebellion and Nathaniel Bacon who used the house in his stand against the tyranny of colonial Governor William Berkeley. Architecturally, Bacon's Castle is considered by many to be the most stately Jacobean house in the United States.



Another major historic landmark is Chippokes Plantation, an original land grant plantation and originally part of the Jamestown colony. It was named for an Indian, Chippokee, who was a great help to the early colonists. The plantation is now a state park and "living" history museum of a working plantation.

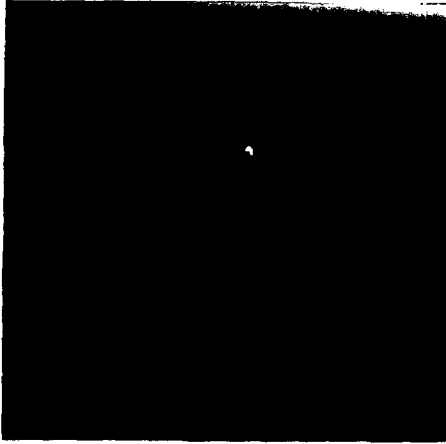


Travelling through the County, one can hardly escape the aura of places and events which helped form the roots of our nation today. Of course, the river and waterfront in Surry has been a major factor shaping the history of the County. The James River served as the colonial highway; and settlements on both sides of the river were dependent upon it for almost everything. In pre-colonial days, the same was true as native American Indians were also dependent upon the river and its tributaries for their survival. Through the turn of the century and into the 1920's the waterfront was the focus of the timber industry for loading and transporting timber from narrow-gauge railways onto schooners bound for world markets. So it should come as no surprise that the vast majority of historical and archaeological sites in the County are, in fact, on the waterfront or related thereto.



The relationship of historical resources to waterfront recreation access falls into two basic categories. First, how to take advantage of these resources for recreational purposes and secondly, how to protect them from potential damage or disturbance when developing sites for recreational purposes.

A comprehensive historical/archaeological analysis of the County's waterfront is far beyond the scope of this study; However, the accompanying map indicates historical and archaeological sites on the waterfront as recorded by the Virginia Department of Historic Resources (VDHR) and other maps etc. available in the county library. VDHR is quick to point out that only about 1.5 percent of the archaeological sites in Virginia have been recorded. This would indicate that there are many more waterfront sites in Surry, and virtually every waterfront location in the County is a potential archaeological site. However, all waterfront recreational facilities proposed for development by a

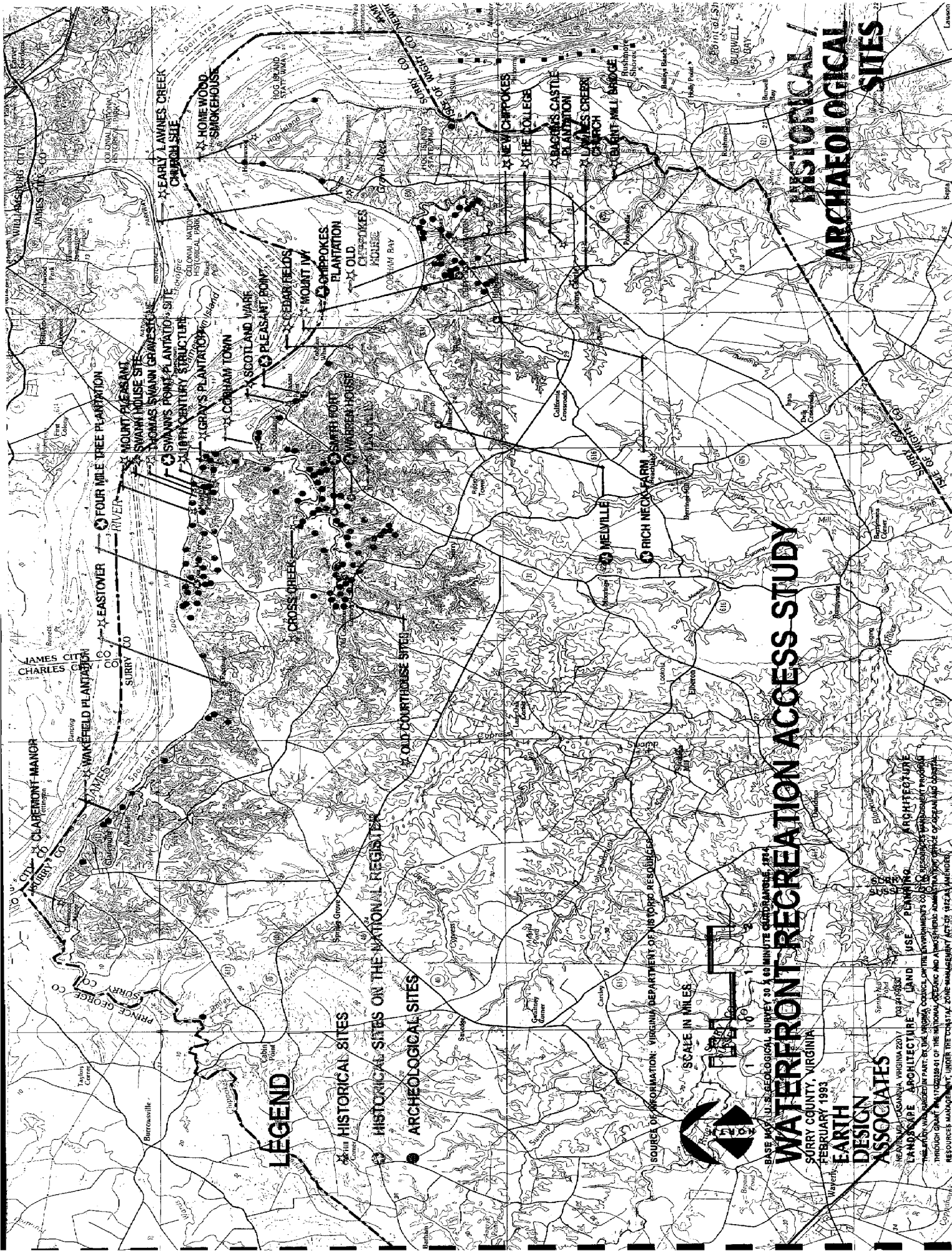


Pleasant Point

public body will, in the permitting process, require an archaeological site survey. Therefore, at least one mechanism is in place which will help protect these resources from potential damage and destruction by public recreational facilities.

The main method of taking advantage of historic resources for recreational purposes will likely be in the form of visitation and interpretation. Many of the private riverfront "plantation" sites will lend themselves to interpretation only from the water because they can be seen from the waterside and are not publicly accessible by land. For the most part, the following map is limited to waterfront-related historic sites; however, it also includes several County historic sites which are not directly on the water, but would likely be a part of a recommended waterfront "tourist loop."

It should be noted that virtually none of the post-colonial sites of wharves, rail connections, etc., appear on VDHR mapping, but the presence of their ruins are still evident on the waterfront and offer great potential for interpretation. Also, no subaqueous archeological sites are recorded on the waterfront. However, symbols on the USGS topo maps and nautical charts indicate sunken vessels, etc., all of which should be considered for preservation interpretation.



LEGEND

HISTORICAL SITES

HISTORICAL SITES ON THE NATIONAL REGISTER

ARCHEOLOGICAL SITES

SCALE IN MILES



WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA

FEBRUARY 1993

EARTH DESIGN ASSOCIATES

NEARBY VIRGINIA, VIRGINIA 2207
LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE
THIS STUDY WAS PREPARED FOR THE VIRGINIA COASTS ON THE ENVIRONMENT COASTAL RECONSTRUCTION PROGRAM
THROUGH GRANT #100000001 OF THE NATIONAL COASTAL AND AESTHETIC ZONE MANAGEMENT ACT OF 1962 (16 USC 1601)

HISTORICAL / ARCHAEOLOGICAL SITES

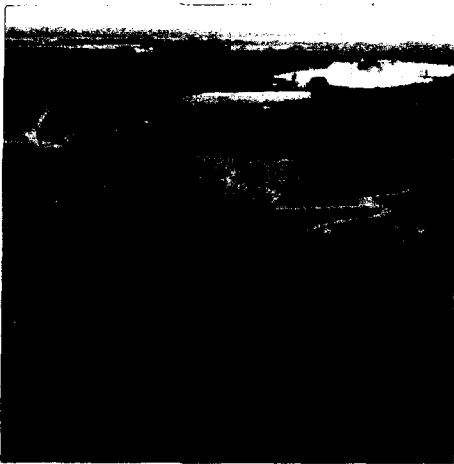
LAND USE/OWNERSHIP/ZONING

Land use, ownership and, to a lesser extent, zoning are important issues related to waterfront recreation and potential access. They have individual implications for land use and when combined, have additional implication.

LAND USE:

Land uses on the water can be generally characterized as follows:

Agriculture/Forest. The majority of waterfront land in Surry is in agricultural and forest use. Considered by itself and depending upon the character of the waterfront present, this land would be considered to have high potential for recreational use.

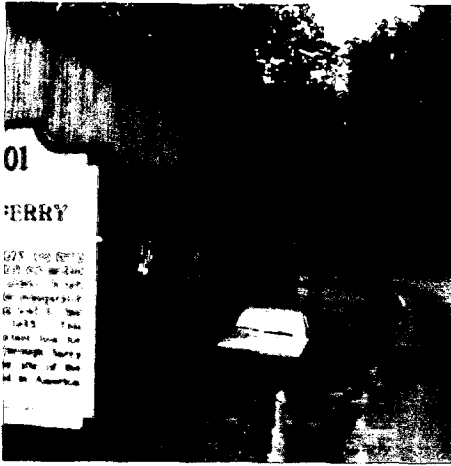


Lawnes Creek

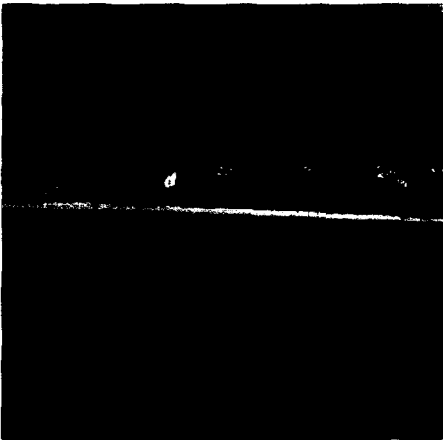
Conservation. Conservation uses of waterfront land in the County constitute the second-largest category. These lands are basically non-county, government-owned lands, including Chippokes Plantation State Park, Hog Island SWMA and the Colonial National Park at Swanns Point. These lands currently offer waterfront recreation in the form of nature study, historic interpretation, hunting, bank fishing, sightseeing, canoeing and the only publicly owned boat-launching facility in the County (Lawnes Creek). They have the potential for additional similar activities, but would not be compatible with more active, water-related recreation.

Industrial. Industrial waterfront land use in the county is limited to the Surry Nuclear Plant. Industrial land, in this case, is somewhat of a misnomer in that this waterfront is atypical of most industrial waterfronts. Except for the intake structure on the east side of the site and the outlet canal/breakwater on the west, it is basically in its natural state and might well have potential for water-related recreational activities.

Business/Commercial. Business and commercial land uses on the waterfront are extremely limited. At Crouch Creek there is a small marina and "fish market" described earlier. Scotland has the only business-zoned property on the waterfront but this



Scotland



restaurant/amusement center has recently closed. Other waterfront business uses include the Grey's Creek Marina, a restaurant/concession at Sunny Meadow Beach, a john boat concession at Sunken Meadow Pond, and a restaurant, also currently out-of-business, at Claremont Beach. Recreational potential of these sites is discussed in the Recommendations section.

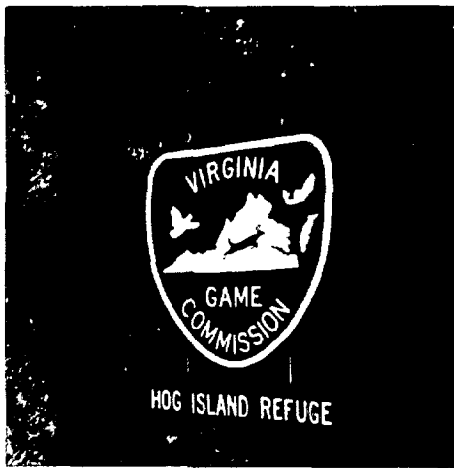
Single-Family Residential. In recent years several single-family residential subdivisions have been developed on waterfront property. Some of these include Chanco Waters, Mount Ivy and Surry Landing. These areas are not thought to have much or any potential for public recreation.

Seasonal Private Vacation Communities. Most of the "developed" waterfront property in the County falls into this general land-use category. These river cottage communities are typical of those developed in the 40s in many tidewater locations throughout Virginia. They vary in quality, but generally comprise small cottages and/or mobile homes on small lots of one-half to one and one-half acres. Most of these communities have a common waterfront recreational area for owners and guests. Typical of these communities are Claremont Beach, Guilford Heights, Sunny Meadow Beach and Mount Ivy Beach.

LAND OWNERSHIP

Land ownership is the major limiting factor to waterfront recreational access in the County. When considering the potential for public access to the waterfront, land ownership falls into the following categories:

- **Publicly Owned Non-County** (public-state and federal land). The percentage of publicly owned waterfront property which is "open to the public" is much greater in Surry County than in most municipalities in Virginia. Statewide, less than one-half of one percent of waterfront property is publicly owned and in Surry this percentage is



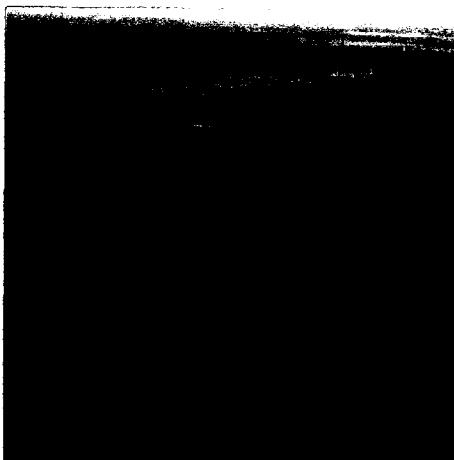
Hog Island SWMA

closer to 20%. However, this can be very misleading in that publicly owned accessible lands are limited in the kinds of recreational opportunities provided.

The lands which comprise Chippokes Plantation State Park, the Hog Island State Wildlife Management Area and the Colonial National Park are primarily for the purposes of historical interpretation, natural heritage preservation and wildlife management and are not for more "active" kinds of recreation.

- **Public Owned County** . As stated earlier, there are approximately 75 miles of waterfront in Surry County and the County doesn't own any of it. This obviously presents serious limitations on its ability to provide water-related recreational services to its citizens.
- **Civic Organizations.** There are three contiguous large tracts of land totaling over 1100 acres on the waterfront which are owned by civic organizations. These are:
 - PIPSICO: 916 acres owned by the Boy Scouts of America.
 - Eastover: 110 acres owned by the Baptist Association of Virginia.
 - Camp Chanco: 125 acres owned by the Episcopal Diocese of Southern Virginia.

Each of these properties is operated separately, but in similar ways as camp/retreat complexes. Properties which are owned by civic organizations are thought to have potential for shared public use.



Timberlands

- **Private Timberland Companies.** About 15 percent of the waterfront of the County is in this type of ownership and, at least at the water's edge, should be kept in its natural state. Sites within these large tracts may be suitable for waterfront recreation. It is likely that purchase or use of parcels within these large tracts would be easier than similar parcels within owner-occupied farms or timberland.



Farmlands

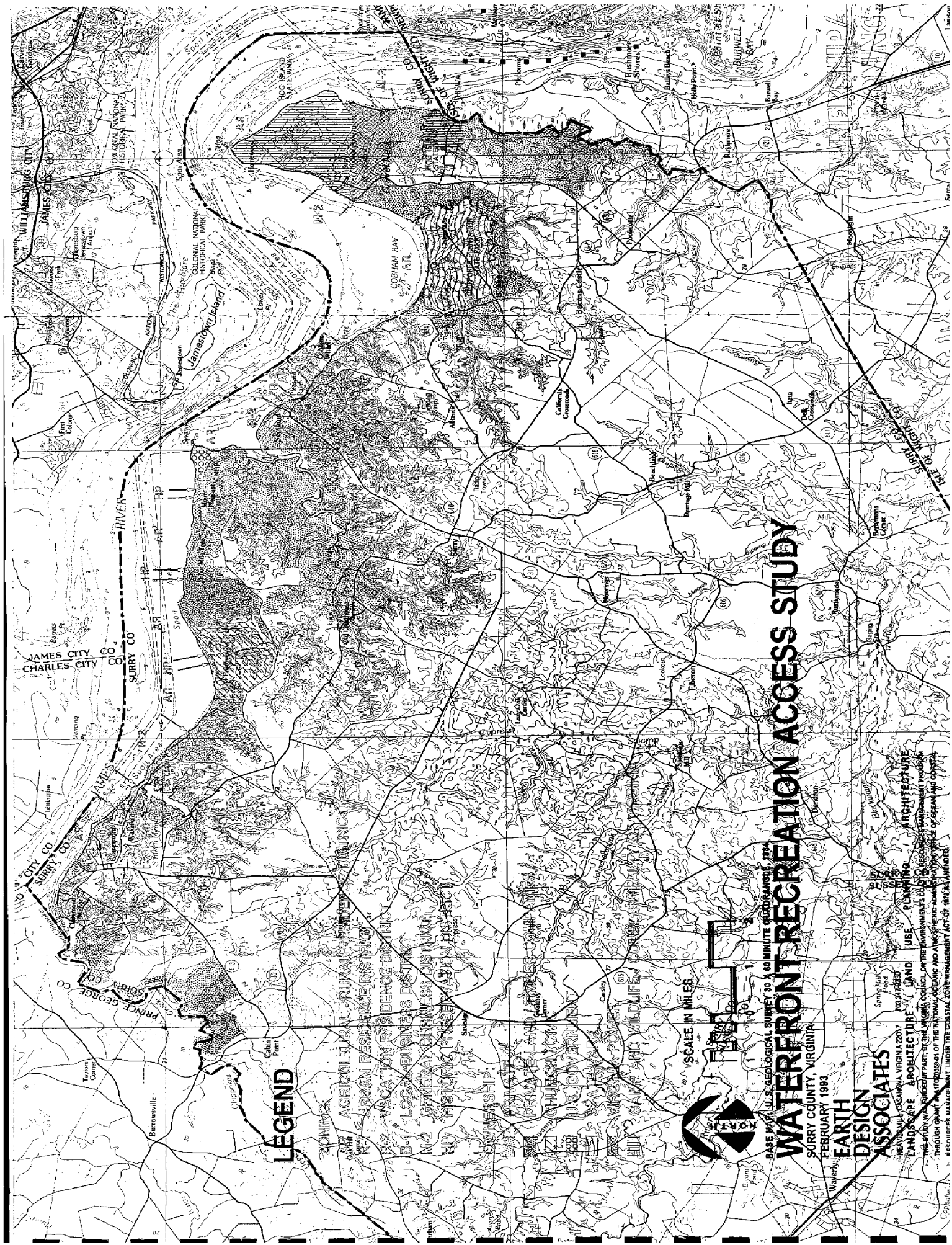


Claremont Beach

- **Private Owner-Occupied Farm/Timberland.** In terms of land characteristics, this property would offer the same recreational potential as the preceding category, but traditionally, the owners of these properties are less likely to sell out parcels, or allow public recreational uses on their property. However, whole privately owned farms or timberlands may become available for sale. In some cases for tax, preservation or other reasons, owners may wish to give property or deeds of easement for designated recreational uses.
- **Private, Single-Family Home Ownership .** This category is not thought to have much, if any, public recreational potential. Traditionally owners of private single-family lots are very guarded about allowing the general public onto their property.
- **Private Homeowner Associations.** This category is thought to present some opportunity for general public recreation through agreements with the associations. There could be tax, user fee facility improvement or other incentives to these associations in negotiating public use agreements.
- **Private Commercial.** Since waterfront commercial property is so limited within the County, it is thought that where it does exist, it could be very profitable for suitable water-related businesses.

ZONING

Zoning in the County generally matches land use and vice versa. Recreational use and zoning in general do not appear to be in conflict with each other, especially since the county can amend the zoning ordinance to accommodate whatever kind of recreation is considered desirable.



LEGEND

- 1. AGRICULTURAL - RURAL
- 2. URBAN RESIDENCE DISTRICT
- 3. VACATION RESIDENCE DISTRICT
- 4. LOCAL BUSINESS DISTRICT
- 5. GENERAL BUSINESS DISTRICT
- 6. HISTORIC PRESERVE DISTRICT
- 7. COMMUNITY
- 8. PARKS AND RECREATION
- 9. CHURCHES
- 10. SCHOOLS
- 11. VETERANS
- 12. JAIL
- 13. COURT HOUSE
- 14. POST OFFICE
- 15. FIRE STATION
- 16. POLICE STATION
- 17. TRANSIT STATION
- 18. AIRPORT
- 19. RAILROAD
- 20. HIGHWAY
- 21. BRIDGE
- 22. TUNNEL
- 23. DAM
- 24. LEVEE
- 25. FLOOD PLAIN
- 26. COASTAL ZONE
- 27. MARSH
- 28. SWAMP
- 29. LAKE
- 30. RIVER
- 31. CREEK
- 32. STREAM
- 33. POND
- 34. BEACH
- 35. DUNE
- 36. CLIFF
- 37. CANYON
- 38. MOUNTAIN
- 39. HILL
- 40. VALLEY
- 41. PLAIN
- 42. DESERT
- 43. TUNDRA
- 44. SAVANNAH
- 45. STEPPE
- 46. PRAIRIE
- 47. MOUNTAIN
- 48. HILL
- 49. VALLEY
- 50. PLAIN



SCALE IN MILES

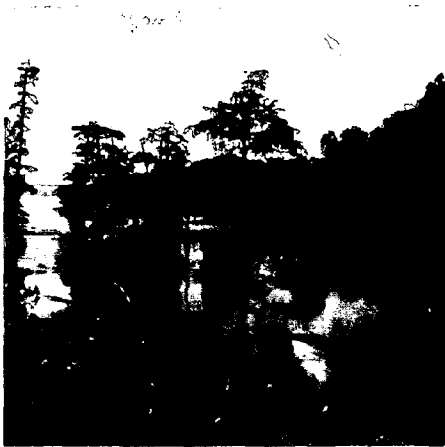
WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA

FEBRUARY 1993

DESIGN ASSOCIATES

THE STUDY WAS COMPLETED BY THE JAMES RIVER COUNCIL OF ENVIRONMENTALISTS (JCE) THROUGH GRANT #A10008461 OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC 1601).



Surken Meadow Pond



Above Swanns Point



Sunny Meadow Beach

SCENIC/VISUAL RESOURCES

With few exceptions, all of Surry can be considered visually pleasing and in some of the "untouched" natural areas, exceptionally scenic. Because of its scenic and historic nature, the entire James River in the County it has been designated a State Scenic River.

The visual experience of the waterfront falls into two categories: first, from the land and second, from the water.

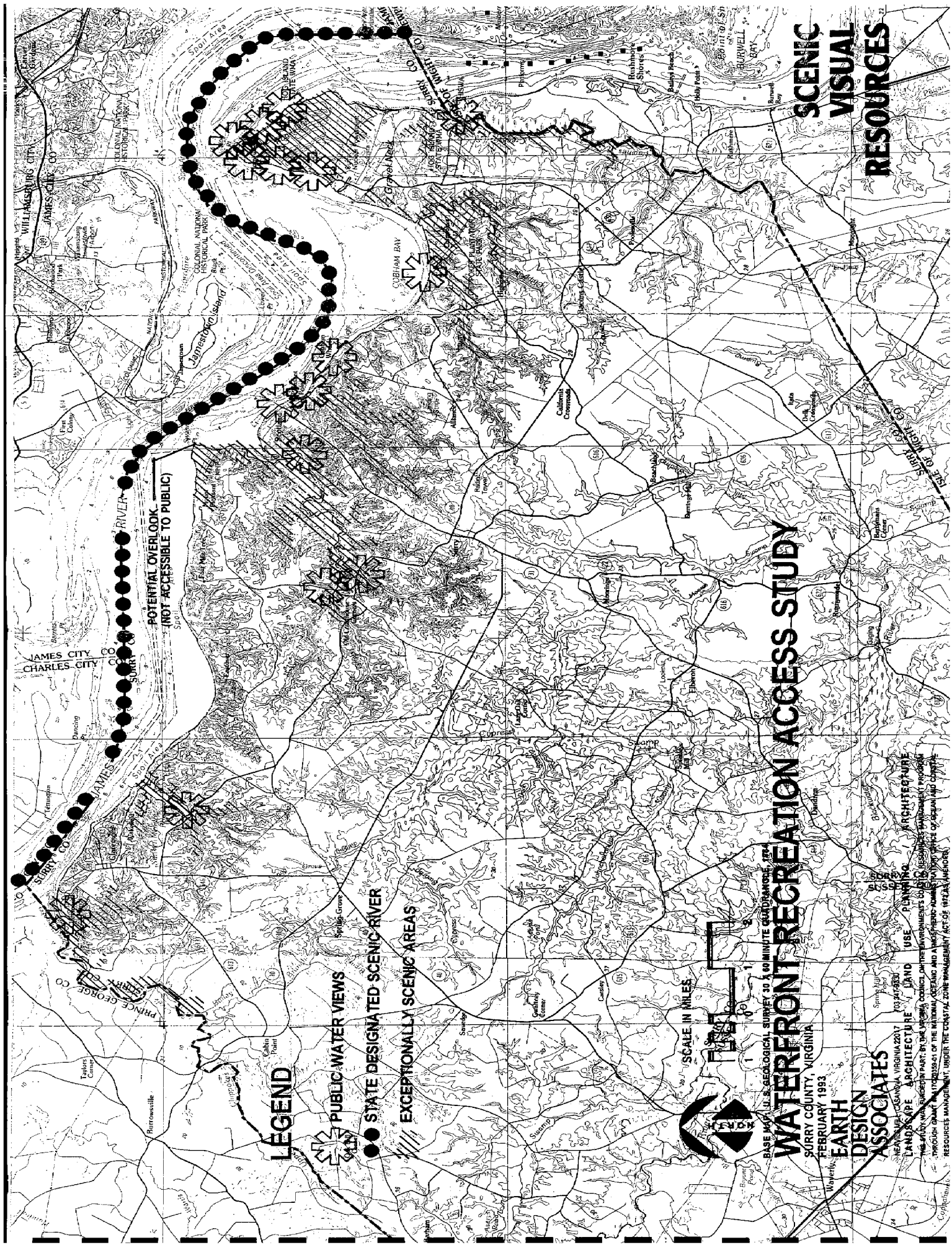
LAND VIEWS

From the land side, the visual environment of the waterfront is characterized by the variety of forest, fields, wetlands and marshes, occasionally punctuated by views and vistas of the river, streams and creeks. In general, the views of the river from the land side are very limited. Though there are numerous topographic vantage points from which outstanding views and vistas exist, very few are accessible to the public. The best example is the view from above Swanns Point. Here, views up and down the River, across to Jamestown and up Grey's Creek are nothing less than spectacular and rival any views in Tidewater Virginia.

Although the visual quality of the County is generally unspoiled, there are occasional areas of visual discord. Examples are unfinished construction sites, eroded areas, high density trailer park developments and billboards. Of particular note is the poor visual quality of development at Sunny Meadow Beach which would otherwise be an area of very high visual quality. Billboards, in general, and those leading to the waterfront from the town of Surry to Scotland, in particular, distract greatly from the scenic quality of the area.

WATER VIEWS

From the water side, the majority of Surry County appears much as it did in colonial times. Exceptions are the Surry Nuclear Plant, Scotland and various residential developments up and down the river. However, none of these is a major distraction and, in general, the waterfront has very high scenic value lending itself to sightseeing from the river.



SCENIC VISUAL RESOURCES

WATERFRONT RECREATION ACCESS STUDY

BASE MAP: U.S. GEOLOGICAL SURVEY 30 x 60 MINUTE QUADRANGLE 174

FEBRUARY 1993

WATERFRONT

DESIGN

ASSOCIATES

NEATON, VIRGINIA 22124
LANDSCAPE ARCHITECTURE / PLANNING / ARCHITECTURE
THIS MAP IS A RECREATION PLAN FOR THE JAMES RIVER. IT IS A VISUAL RESOURCE MANAGEMENT TOOL. IT IS NOT A LEGAL DOCUMENT. IT IS NOT A SUBSTITUTE FOR A LEGAL DOCUMENT. IT IS NOT A SUBSTITUTE FOR A LEGAL DOCUMENT.

LEGEND

- PUBLIC WATER VIEWS
- STATE DESIGNATED SCENIC RIVER
- EXCEPTIONALLY SCENIC AREAS

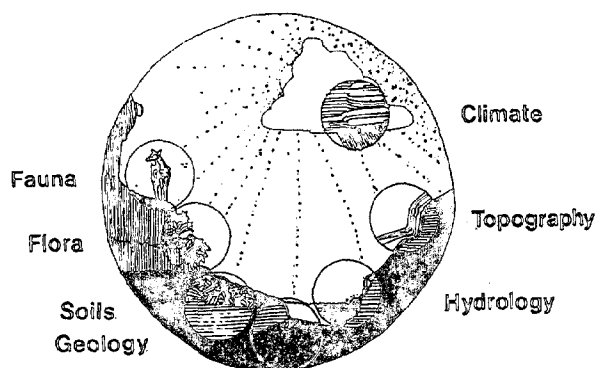
SCALE IN MILES



ENVIRONMENTAL RESOURCES

Introduction

The basic relationship between environmental resources and waterfront recreation are similar to historic resources, although the components are more numerous and the relationships more complex. Of major concern is how to take advantage of these resources for recreational purposes without damaging or destroying them.



Although the various environmental resource components are listed here separately, they are interwoven components of an interactive network. For analysis and planning purposes they have been separated into categories which have specific recreational, land and water use implications. In planning activities and facilities, we should seek to create the ideal relationship between facilities and environmental resources so that they complement each other.

For at least the past decade, the Chesapeake Bay watershed, of which the study area is a part, has become the focus of a large-scale environmental protection campaign to "Save the Bay." In 1988, the Virginia General Assembly passed the Chesapeake Bay Preservation act based upon recommendations made by the land-use round table of the Chesapeake Bay Commission. The act was passed on the premise that healthy state and local economies rely upon a healthy Chesapeake Bay.

The Act gave all local governments power to exercise their planning and zoning authority to protect the quality of state waters. It requires all Tidewater localities (east of the fall line) to designate "Chesapeake Bay Preservation Areas" and to adopt criteria to manage these areas for the protection of water quality within their comprehensive plans and ordinances. The act also provides for the creation of the Chesapeake Bay local assistance board and department to carry out the purposes and provisions of the Act. The department offers technical and financial assistance to localities in implementing the Act.

Therefore Tidewater communities, including Surry, must map resource protection areas which include:

- Tidal wetlands and shores
- Nontidal wetlands connected by surface flow and contiguous to tidal wetlands and tributary systems.
- Other sensitive lands (those with intrinsic water quality value).
- A hundred-foot-wide buffer zone and resource management area (RMA). The resource management area may include flood plains, highly erodible soils, steep slopes, highly permeable soils, nontidal wetlands outside the RPA or other areas necessary to protect the state waters.

Local communities are required to make ordinance changes to include land use and development performance criteria intended to prevent a net increase in nonpoint source pollution from new development. Surry has prepared the necessary maps, etc. to determine the resource protection and resource management areas. The entire study area, which is the watershed of the James River in Surry county, is within the resource management area.

SUBAQUEOUS/MARINE/ShORELINE CONDITIONS

It is speculated that the early settlers first landed and settled at Jamestown because of the deeper water on the northern bank of the river. However, the Surry side was settled soon thereafter and supported much of the life in the new colony. During these early times, the river was the focus of colonial transportation and can be thought of much as our current interstate highway system.

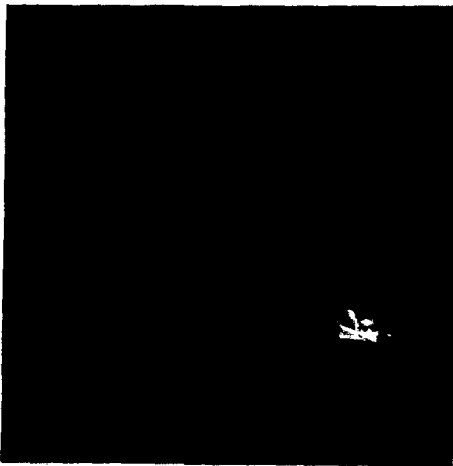
As pertains to present-day waterfront recreation, there are numerous factors about the water, shoreline and its bottom which will influence recreational planning. For discussion purposes, subaqueous, marine and shoreline characteristics have been divided into the following categories:

Width/Depth

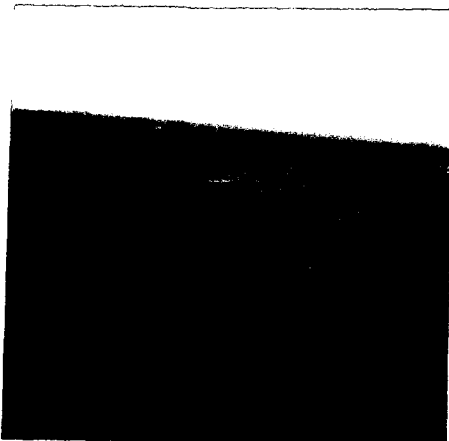
The James River, in Surry County, ranges in width from approximately one mile at Upper Chippokes Creek to nine-tenths of one mile at Claremont to three and one-half miles at Cobham Bay, to one and three-quarter mile at Hog Island and three and one-half miles at the mouth of Lawnes Creek.

It ranges in depth from less than a foot, at the shoreline, to over 30 feet in the shipping channel. Generally, the depth from the shore to the channel is from two to fifteen feet. The shoreline is relatively shallow which restricts boating and other water-related recreation. Users of boat ramps along the River report problems of shallow depth and restrictions on launching boats at low tide. The water at Cobham Bay is notoriously shallow which limits its recreational potential, particularly for power boating, water skiing and related activities.

Surry has several deep creeks, including Upper Chippokes forming the western boundary of the County, Grays Creek, Crouches Creek, Lower Chippokes Creek and Lawnes Creek, which forms its eastern boundary. These creeks vary in width at the mouth from 4500 feet at Upper Chippokes to 500 feet



Open Water



Mouth of Grey's Creek

at Lawnes Creek, and generally vary in depth from about 10 feet inside the mouth to less than a foot at the headwaters. All are tidal and brackish with the exception of their headwaters which are fresh.

Despite the depth of the creeks themselves, each has more or less a saltation problem at the mouth which restricts boat access at low tide and limits access to shallow draft vessels of two feet or less. Any serious marina plan within these creeks will have to include dredging which may or may not be allowed by regulatory agencies.

Subaqueous Lands:

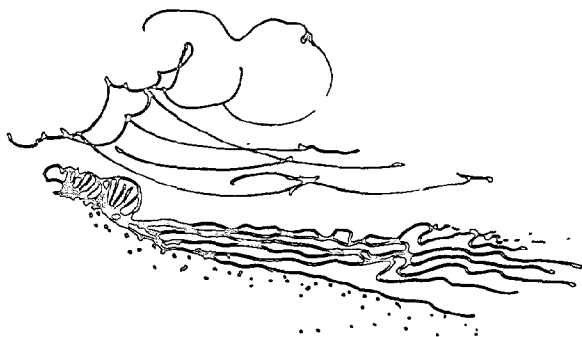
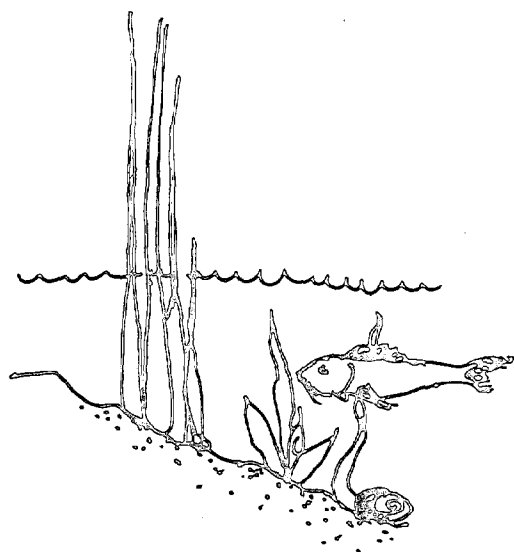
Subaqueous lands are the beds of the bays, ocean, rivers, streams, and creeks and are the property of the Commonwealth of Virginia. Within these beds are rich resources which have served Virginia's commercial, recreational, and environmental needs for generations.

A set of subaqueous guidelines has been developed by the Virginia Marine Resources Commission to minimize impacts on aquatic habitat, promote the public health, safety and welfare of the citizens of the Commonwealth, and accommodate the economic needs of Virginia. Important considerations in dealing with subaqueous lands include the protection and care of submerged aquatic vegetation valuable to fisheries management, and minimizing impact on oyster and clam beds. Dredging and other construction activities must be approved prior to development on subaqueous lands.

Wind/ Wave Conditions:

The relationship of a water body's width (reach), depth and the wind speed and direction are generally responsible for wave action or "sea" conditions which affect boating and shoreline erosion. Higher waves are produced by stronger winds over a longer reaches of deeper water. Because creeks are generally protected by the land from strong winds, they are considered "protected areas."

The most concentrated wind/wave action which affects

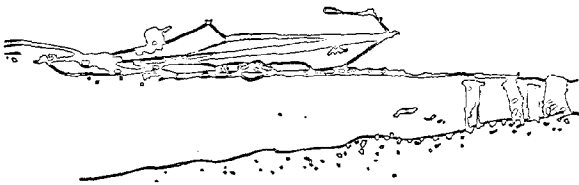


boating along the River in the County is from Hog Island easterly and southerly past the mouth of Lawnes Creek. This area of "rougher seas" further limits boat access from Lawnes Creek and potential boat launching facilities directly on the shore of this stretch of the river.

Tying all but very large boats up to piers anywhere in the river for an extended time is simply not done because of the potential destructive force of the waves during storms. Boats, such as the Jamestown/Scotland ferries, are large enough that they don't sustain damage from the large waves that can be generated on the river and therefore can be docked.

Hazards

As mentioned earlier, the waterfront in the County is "old" in terms of how long it has been used and settled by people. Here people have built and discarded things in the river, denuded its shoreline, etc., resulting in hazards to boating and other uses. Although this is not intended to be an inventory of hazardous conditions in Surry County waters, certain general conditions should be noted.



The most obvious hazards to boating are the numerous old wharves, piers, stumps, etc. which occupy the waterfront. Some are barely visible from the water, while others are completely submerged. These are very hazardous conditions particularly to high-speed boats which are so popular today.

Other hazards worth noting are the Virginia Power Plant water discharge canal on the west side of the Virginia Power property which produces currents hazardous to small boats.

Obviously, the shipping channel and the Scotland/Jamestown Ferry route are to be avoided for recreational activities. The most up to date nautical charts and marine/subaqueous conditions must be reviewed when planning specific areas for recreation along the waterfront.



SHORELINE EROSION

The erosion of shorelines is a natural process which can either be advanced or inhibited by human occupancy of erosion susceptible lands. The threat of this type of erosion can lead to the potential destruction of subaqueous lands, marshes, the habitats of many indigenous plant and animal species, and personal property. With the destruction of these valuable resources comes the potential alteration of the existing ecology which may or may not be suitable to the native wildlife leading to their possible disappearance or extinction.

With this in mind, it is of the utmost importance to protect these areas by any environmentally sound measures possible. Of course, the most desirable measure is to allow these areas to remain in their natural conditions. It is not, however, always possible to accomplish this.

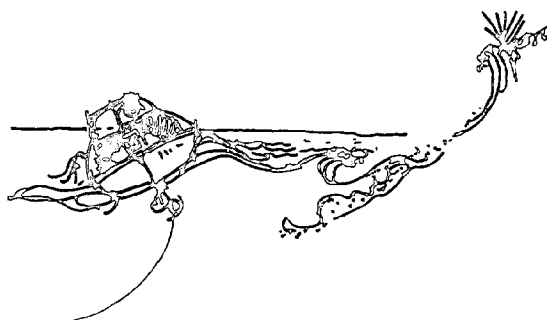
There are several precautions and construction measures which may be applied when providing recreational facilities in areas with erosion potential among those commonly employed are: Marsh bridges and/or piers over wetlands, rep rap, jetties, groins, and bulkheads. It is important to realize and study the impact that any of these measures may have on adjacent lands. For example, depriving shorelands down river of sand supplies, therefore causing erosion problems.

The rates of erosion as designated on the Shoreline Conditions map are classified as follows:

Moderate - 1 to 3 feet of erosion per year

Moderate Critical - 1 to 3 feet of erosion per year in areas which buildings, roads, or other structures are in danger.

Severe - Greater than 3 feet of erosion per year.



The Role of Boat Wakes in Shoreline Erosion

The contribution of boat wakes to the problem of shoreline erosion can not be overlooked when studying waterfront recreational facilities. While the greatest impacts occur in narrow creeks where boats must pass as close as two to three hundred feet of the shoreline, there is still potential along other types of shorelines.

Much of the potential erosion, as a result of boat wakes, occurs when boats pass close to the shoreline at high rates of frequency. However, other factors do come into play, such as wind/ wave activity (not as prominent in narrow creek passages), boat hull characteristics, slope of creek/ river bottoms near the shore line, boat speed and water depth. Another important factor to consider is the geologic makeup of the shoreline. Exposed shorelines with steep gradients composed of sand or gravel are considered the most susceptible to erosion problems. Boat wake erosion potential must be considered when siting boat ramps and marinas.

SHORELINE CONDITIONS:

The three different physiographic elements associated with the shorelines of Surry County are characterized as follows:

Fastlands: The relatively stable lands which extend from the landward most limit of the shore zone.

Low Shore: 20 Feet of relief, with or without a cliff.

Moderately Low Shore: 20 to 40 feet of relief, with or without a cliff.

Moderately High Shore: 40 to 60 feet of relief, with or without a cliff.

High Shore: 60 feet or more of relief, with or without a cliff.

Shore Zone: The zone between the James River and its tributaries and the fastland.

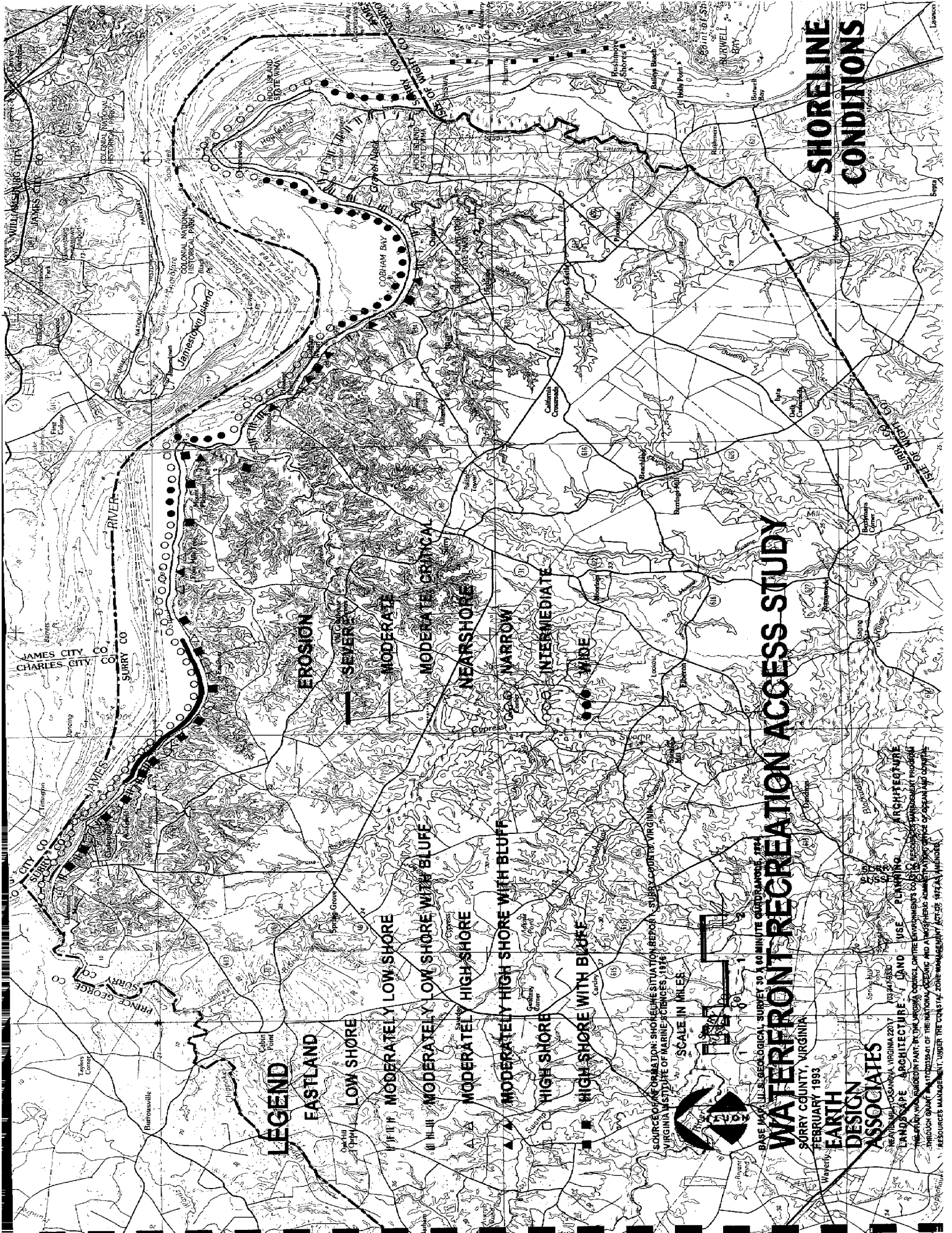
Near Shore: The zone from the shore zone to the 12 foot contour as dictated by mean low water datum, including tidal flats.

Narrow: Located less than 400 yards from shore.

Intermediate: Located from 400-1400 yards from shore.

Wide: Located more than 1400 yards from shore.

Consult Nautical Charts for Marine Conditions.



LEGEND

EASTLAND

LOW SHORE

MODERATELY LOW SHORE

MODERATELY LOW SHORE WITH BLUFF

MODERATELY HIGH SHORE

MODERATELY HIGH SHORE WITH BLUFF

HIGH SHORE

HIGH SHORE WITH BLUFF

EROSION

SEVERE

MODERATE

MODERATELY CRITICAL

NEARSHORE

NARROW

INTERMEDIATE

WIDE

WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA

FEBRUARY 1993

EARTH DESIGN ASSOCIATES

LANDSCAPE ARCHITECTURE / PLANNING / ARCHITECTURE

NEARBY: SURRY COUNTY, VIRGINIA 22017 703-471-5500
LANDSCAPE ARCHITECTURE / PLANNING / ARCHITECTURE
THIS MAP WAS PREPARED FOR THE VIRGINIA COASTAL PLANNING COMMISSION'S COASTAL RECREATION MANAGEMENT PROGRAM
THROUGH GRANT FUNDING FROM THE NATIONAL SCIENCE FOUNDATION AND A RESEARCH AWARD FROM THE VIRGINIA COASTAL PLANNING COMMISSION
RESOURCES MANAGEMENT UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC 1601)

SHORELINE CONDITIONS

SOURCE OF INFORMATION: SHORELINE SITUATION REPORT, SURRY COUNTY, VIRGINIA
VIRGINIA INSTITUTE OF MARINE SCIENCES, 1976

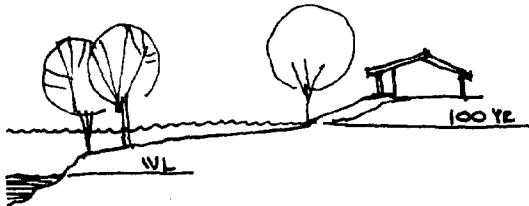
SCALE IN MILES



BASE MAP: U.S. GEOLOGICAL SURVEY 30 x 60 MINUTE QUADRAANGLE 37A

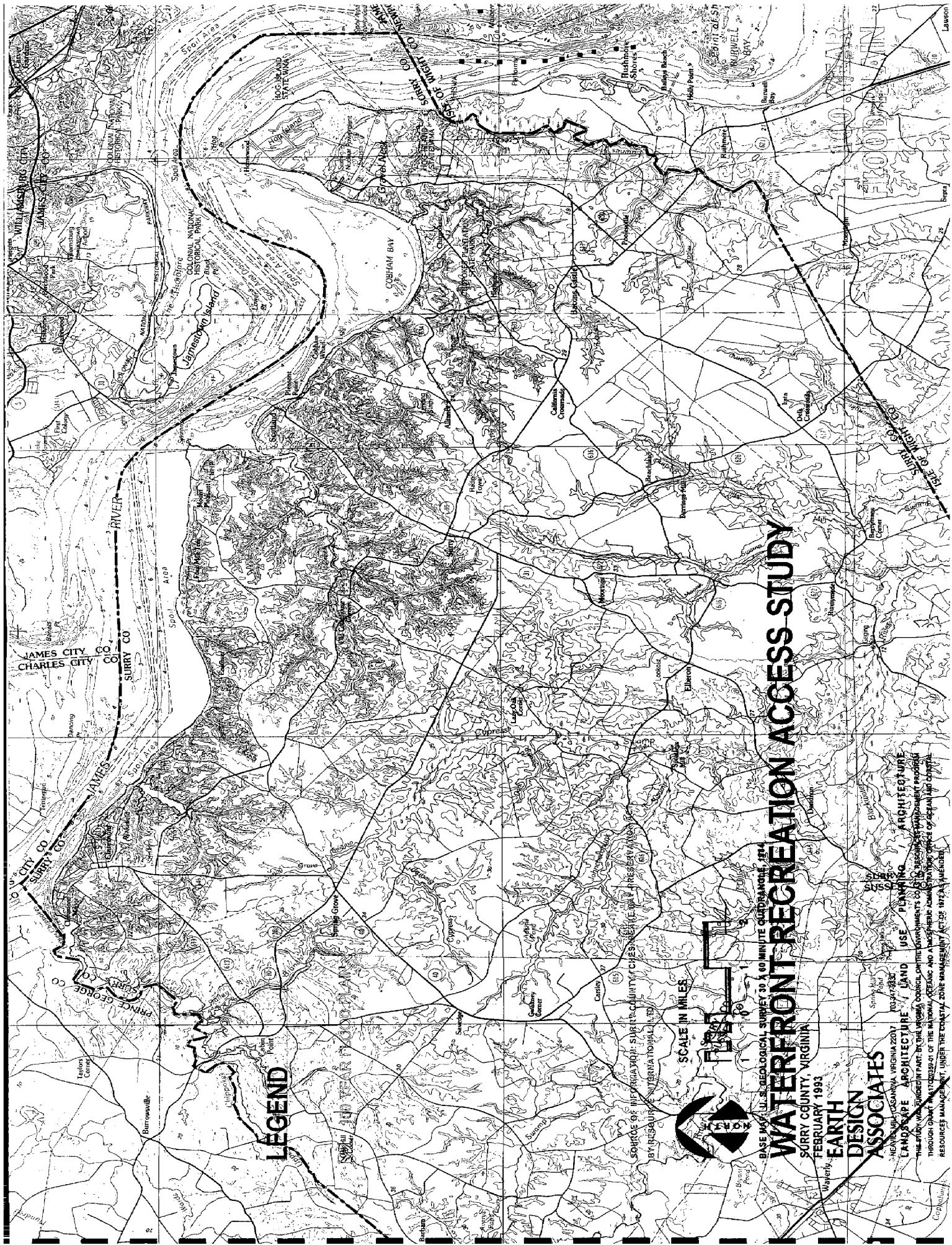
100 YEAR FLOOD PLAIN

The 100 Year Flood Plain comprises those lands which, by virtue of their elevation above an adjacent water body and position in the landscape, are susceptible to flooding on an average frequency of once every 100 years. The areas within the flood plain may be subjected to damage caused by water currents, flooding, debris, etc., on fast-moving rivers and streams, or simply inundation on still or slowly moving water bodies.



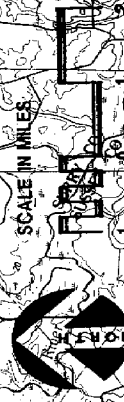
Flooding is the major cause of death by weather events in this country, and causes billions of dollars of property damage annually. Almost all jurisdictions regulate land use and severely restrict permanent development in the flood plain for reasons of safety and protection of property. Although the flood plain severely restricts development, it does serve as a protective measure and buffer zone for water bodies and through flood plain restrictions, preserves open space, thus creating opportunities for greenway corridors adjacent to these bodies.

Flood plain and waterfront recreation can be an ideal relationship of environment and land use. However, the same rules apply to recreation as any other development activity. First and foremost, permanent structures which are subject to flood damage within the flood plain must not be built. The same is true of any facility such as a porta-john which would become a potential water pollutant in a flood condition. Individual flood characteristics, erosion potential, and other site-specific flood-related conditions must be analyzed when planning any waterfront facility.



LEGEND

100 YEAR FLOODPLAIN
500 YEAR FLOODPLAIN



WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA
FEBRUARY 1993

WATERFRONT
EARTH

DESIGN
ASSOCIATES

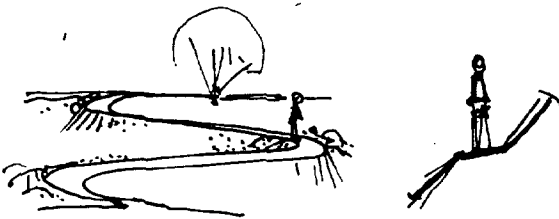
1001 W. LEXINGTON AVENUE, SUITE 200, RICHMOND, VIRGINIA 23220
PHONE: (804) 771-1234
FAX: (804) 771-1235
LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE
THE FIRM HAS SERVED IN PART BY THE VIRGINIA COASTAL AND WATERSHED MANAGEMENT PROGRAM
THROUGH GRANT #A020189-01 OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, OFFICE OF SPECIAL LAND CONSERVATION
RESOURCES MANAGEMENT, UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972 AS AMENDED

STEEP SLOPES

The slope of the land is an important environmental consideration which can contribute to, or help prevent soil erosion. Other factors, such as vegetative cover and soil type are major influences, but simply stated, the steeper the slope, the greater the potential for soil erosion and therefore sedimentation of wetlands water bodies. Sedimentation is a major contributing factor to the environmental degradation of the Chesapeake Bay, not to mention other problems it creates such as restrictions to navigation, boating, etc.

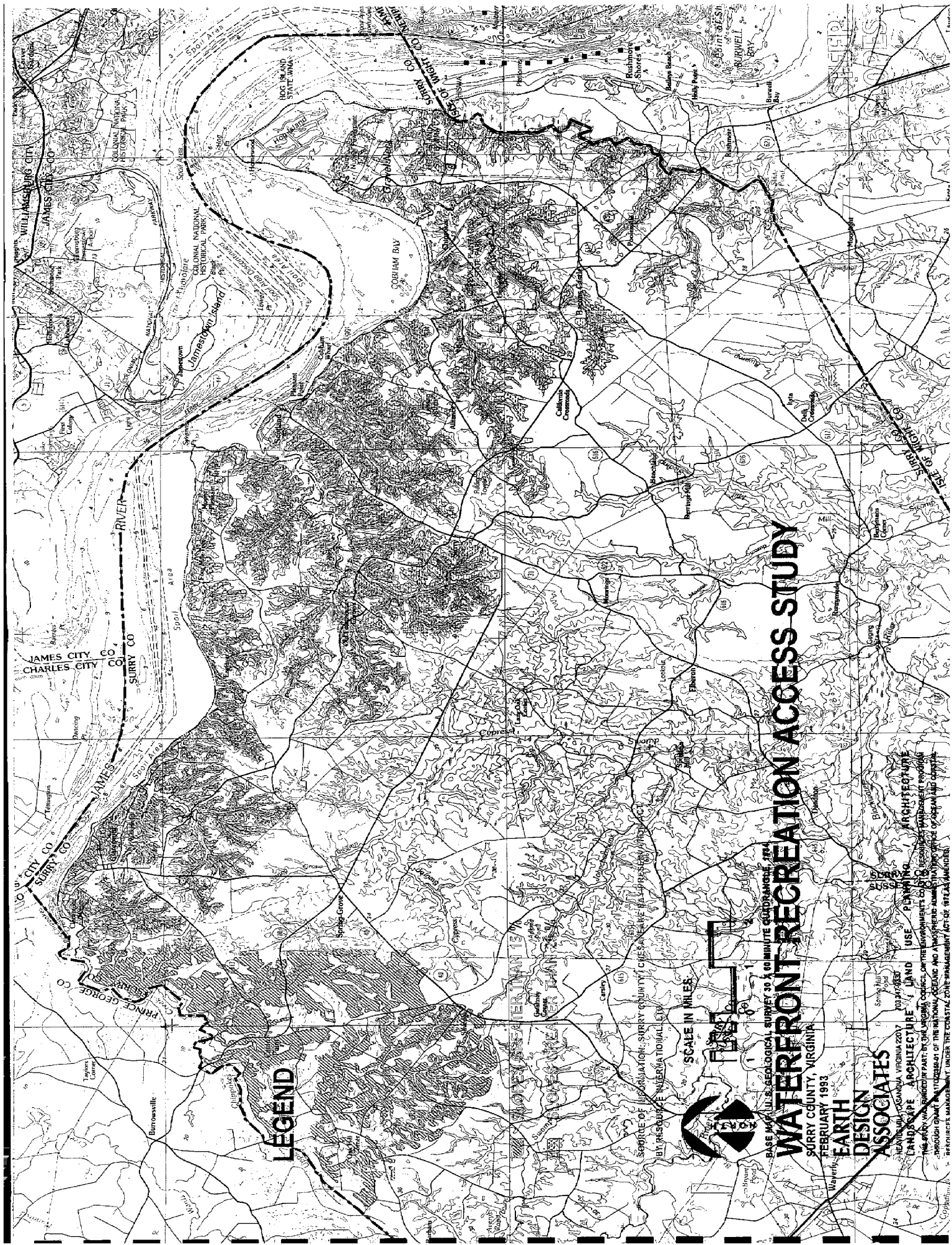
Slopes in excess of 15 percent, or lands which have a change in elevation of more than 15 vertical feet in 100 horizontal feet, are considered to be steep and more highly susceptible to erosion if the natural vegetation is disturbed. Therefore, slopes of 15 percent or greater should be protected from building, development, and other land-disturbing activity.

Certain pole type recreational structures can be built which have minimal impact on slopes. These can include many nature study/ observation structures which do not disturb the slope and blend with the surroundings. However, associated parking, roads and larger land-disturbing activities should be relegated to less steep slopes.



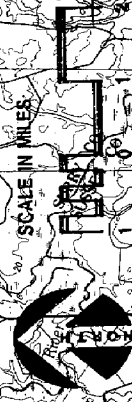
Trails must often traverse steep slopes but can be aligned and designed to have minimal impact. This can be accomplished by constructing them in a switch-back manner with minimal grade on the pathway and a cross slope to avoid channelization of runoff.

Steep slopes have many positive recreational aspects in that they afford views of the landscape beyond and, when protected, contribute to overall open-space preservation and potential for greenways.



LEGEND

SCALE IN MILES



BASE MAP U.S. GEOLOGICAL SURVEY 30 X 60 MINUTE QUADRANGLE 784

WATERFRONT RECREATION ACCESS STUDY

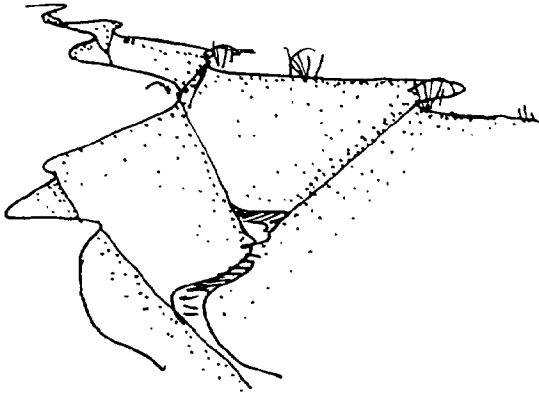
SURRY COUNTY, VIRGINIA

FEBRUARY 1993

EARTH
DESIGN
ASSOCIATES

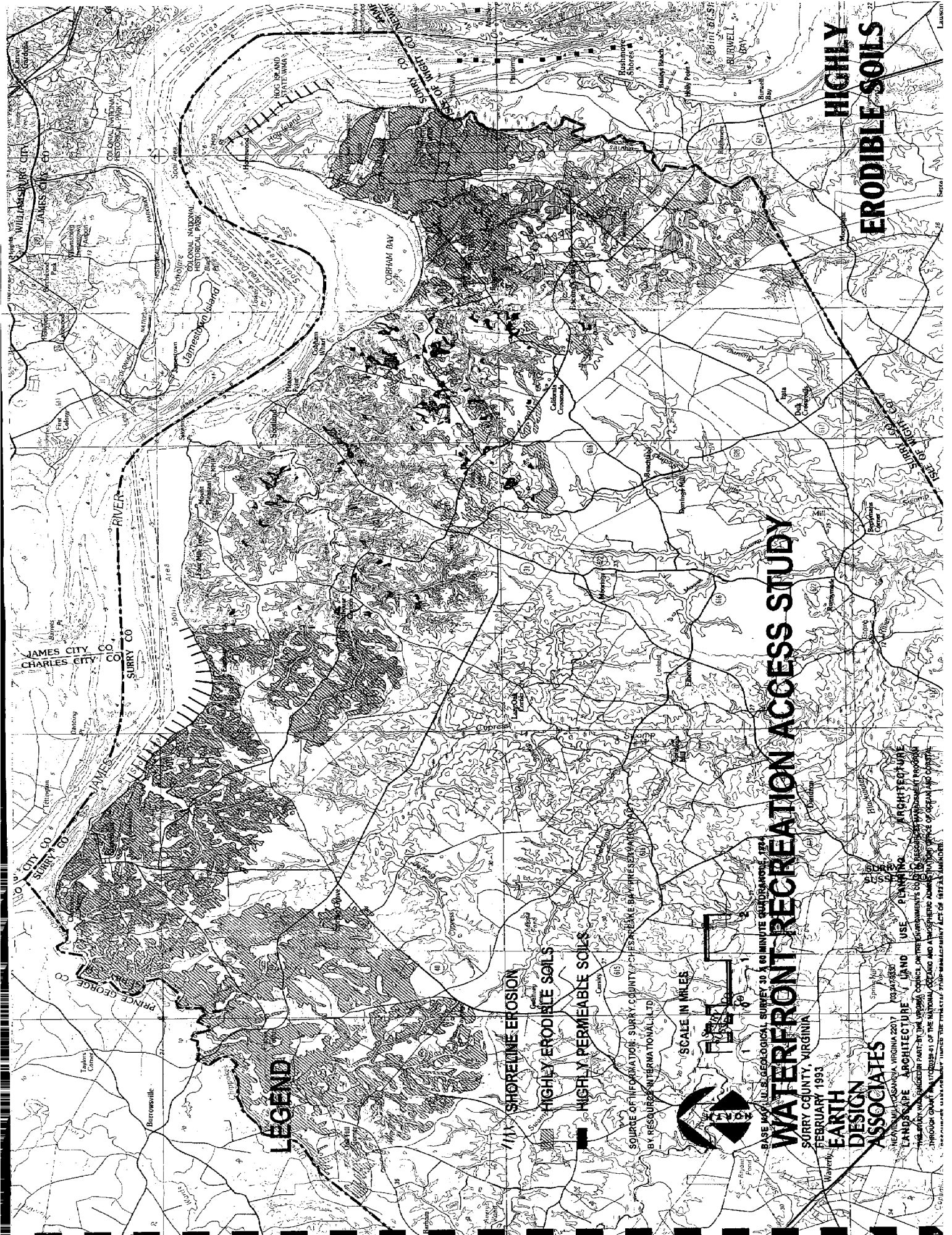
LANDSCAPE ARCHITECTURE / LAND USE / PLANNING / ARCHITECTURE
10341-8837
NEWPORT NEWS, VIRGINIA 23617
THE FIRM WAS SELECTED BY THE LANDSCAPE ARCHITECTS OF THE ENVIRONMENTAL DESIGN GROUP
THROUGH AN OPEN COMPETITION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S OFFICE OF COASTAL ZONE
MANAGEMENT UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC 1601)

ERODIBLE SOILS



The environmental significance of erodible soils is closely related to steep slopes in that if not properly managed, they contribute to erosion, sedimentation and environmental degradation of wetlands, water bodies, etc. Soils are more or less erodible because of their innate characteristics, position in the landscape, and slope. In Surry, these soils have been identified and mapped. In areas with erodible soils, the relationship of land disturbance and steepness of slope becomes more critical, therefore areas of disturbance should be relegated to the flattest slopes.

It's not likely that all erodible soils in the County can be avoided when accommodating waterfront recreation since these soils occupy much of the waterfront. However, where these soils are present, disturbance of steep slopes must be avoided and extra precaution taken in siting and designing facilities. Strict enforcement of best management practices during construction is critical in areas of erodible soils.



LEGEND

1/11 SHORELINE EROSION

HIGHLY ERODIBLE SOILS

HIGHLY PERMEABLE SOILS

SCALE IN MILES



WATERFRONT RECREATION ACCESS STUDY

SURREY COUNTY, VIRGINIA
FEBRUARY 1993

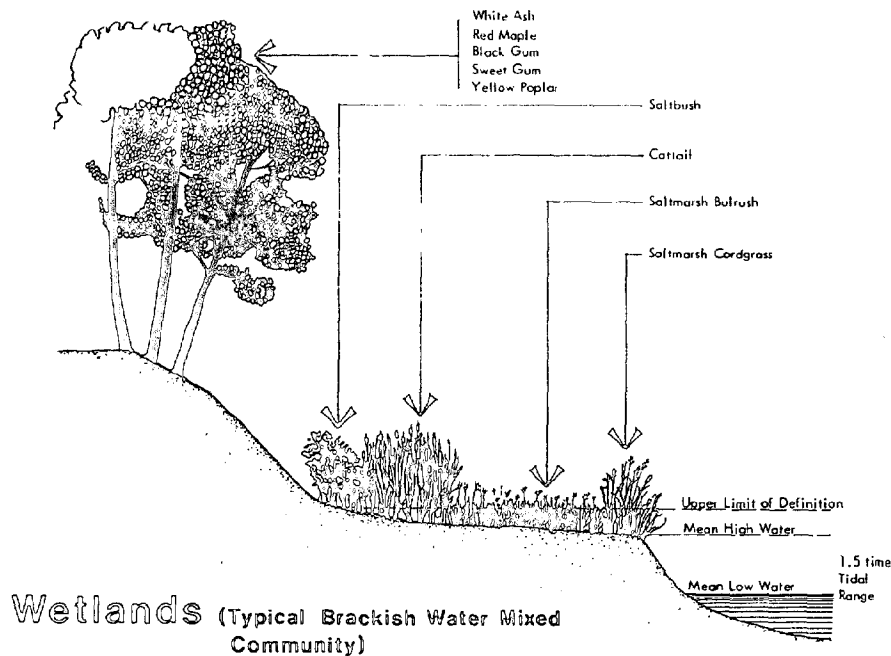
EARTH
DESIGN
ASSOCIATES

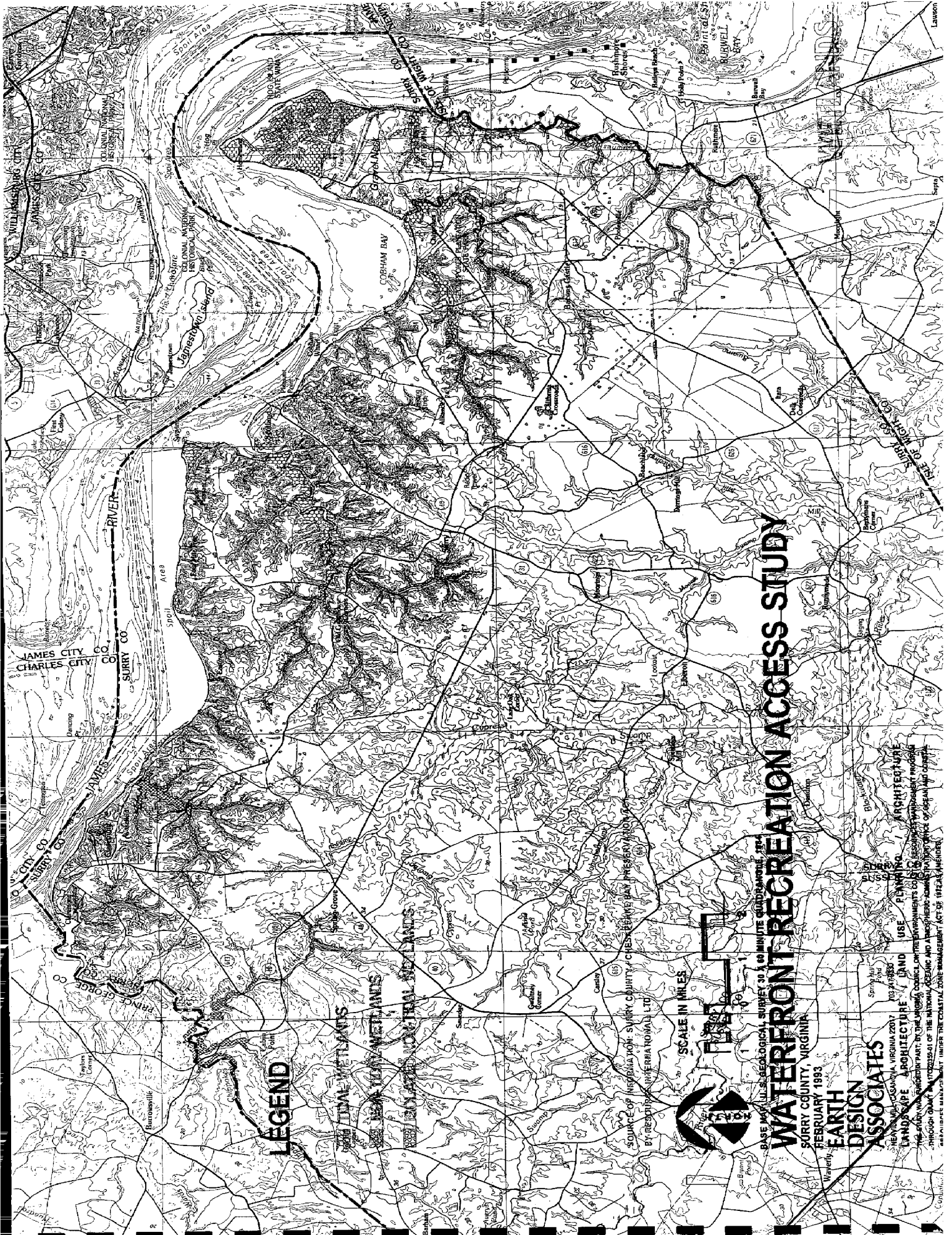
LANDSCAPE ARCHITECTURE / LAND USE / PLANNING / ARCHITECTURE
NEARBY VIRGINIA VIRGINIA 2017 703-425-3330
THIS STUDY WAS COMPLETED PART BY THE VIRGINIA COUNCIL ON THE ENVIRONMENT'S (VCE) REQUEST FOR PROPOSALS (RFP) THROUGH QUANTIFICATION OF THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION'S (NOAA) OFFICE OF OCEANOGRAPHY ACT OF 1972 AS AMENDED.

HIGHLY
ERODIBLE SOILS

WETLANDS

In recent years much emphasis has been placed upon the preservation of marshes and wetlands as well it should. Their function as environmental filters, food producers, fish nurseries, wildlife feeding areas, etc. are vital to our well being on the planet. Surry has a wealth of basically undisturbed wetlands and marsh resources which must be protected for our future. However, this is not to say that they can't be used and enjoyed for recreational purposes. Wetlands offer unique recreational opportunities for nature study, sightseeing, fishing, hunting, etc. which if accommodated in a compatible way, are ideally suited to each other. This obviously excludes land-disturbing activities and facilities, and construction of most structures with the exception of piers, marsh bridges, blinds, observation platforms of pole-type construction, which can be built and exist in harmony with the natural wetland system. The amount of use and "holding capacity" of marshes and wetlands is also critical in terms of their protection and must be evaluated on an individual project basis.





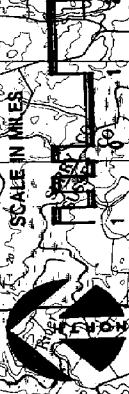
LEGEND

500' TIDAL WETLANDS

200' DEEP TIDAL WETLANDS

100' DEEP TIDAL WETLANDS

SCALE IN MILES



BASE MAP U.S. GEOLOGICAL SURVEY 30 x 60 MINUTE QUADRANGLE, 1754

WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA

FEBRUARY 1993

EARTH
DESIGN
ASSOCIATES

LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE
NEARBY LOCATIONS: VIRGINIA 2207 703-21-1833
THE STUDY WAS COMPLETED BY THE JAMES RIVER COUNCIL ON THE ENVIRONMENT'S GUIDING PRINCIPLES AND METHODS
THROUGH GRANT #17-02355-01 OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE AND OCEANIC
AND ATMOSPHERIC ADMINISTRATION UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972 (CZMA)

NATURAL AREA RESOURCES

Natural area resources are places which by virtue of the character of their flora, fauna, geology, etc. form unique or ecologically significant areas. They may be the habitat of rare or endangered species, areas of exceptional diversity, ecological systems which are highly productive in the food chain, etc.

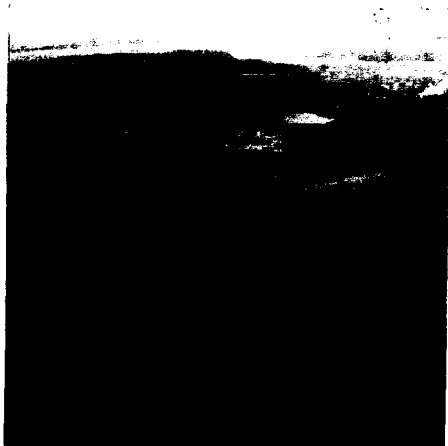
Natural area resources are particularly sensitive to land-disturbing and other human activities and in some instances, such as bald eagle nesting areas, the very presence of humans. However, these same areas are undoubtedly the best for nature study and nature-related recreation. Activities taking place in conjunction with these resources must be carefully studied to understand the exact nature of the resource and its compatibility with the proposed activity.

The Virginia Outdoors Plan recognizes three places within the project study area as "significant areas to be considered for inclusion in the state natural areas systems". They include:

- **James River Ravines**
"... an area of old-growth upland hardwood forest with many distinct montane plants occurring in the coastal plain."
- **Sunken Meadow**
"... significant marsh communities remain."
- **Upper Chippokes**
"... a prime freshwater marsh surrounded by a large, near-mature hardwood forest."

Two other sites appear in the Outdoors Plan which are known to have significant natural areas, but are not included in the foregoing list because they already have separate status. One is Chippokes Plantation State Park and the other is Hog Island State Wildlife Management Area.

The Virginia Institute of Marine Science Tidal Marsh Inventory lists and maps 85 significant marshes in Surry County. The inventory groups these marshes into 12 different categories according to their dominant vegetation and rates their environmental contributions in terms of



Potential Natural Area

these marshes into 12 different categories according to their dominant vegetation and rates their environmental contributions in terms of detritus production, waterfowl and wildlife utilization, erosion buffering, water quality control and flood buffering.

Listed and mapped in the lower James River Watershed Study are four potential natural areas including Upper Chippokes Creek, Sunken Meadow Pond, Swann's Point and Gray's Creek.

In conjunction with the Virginia Institute of Marine Science, the U.S. Fish and Wildlife Service developed an environmental sensitivity atlas of Virginia primarily intended to assist in oil-spill clean up. Its maps give the locations of sensitive habitats as occurring at Upper Chippokes Creek, Upper Gray's Creek, Lower Chippokes Creek, Hog Island Wildlife Management Area and Lawnes Creek.

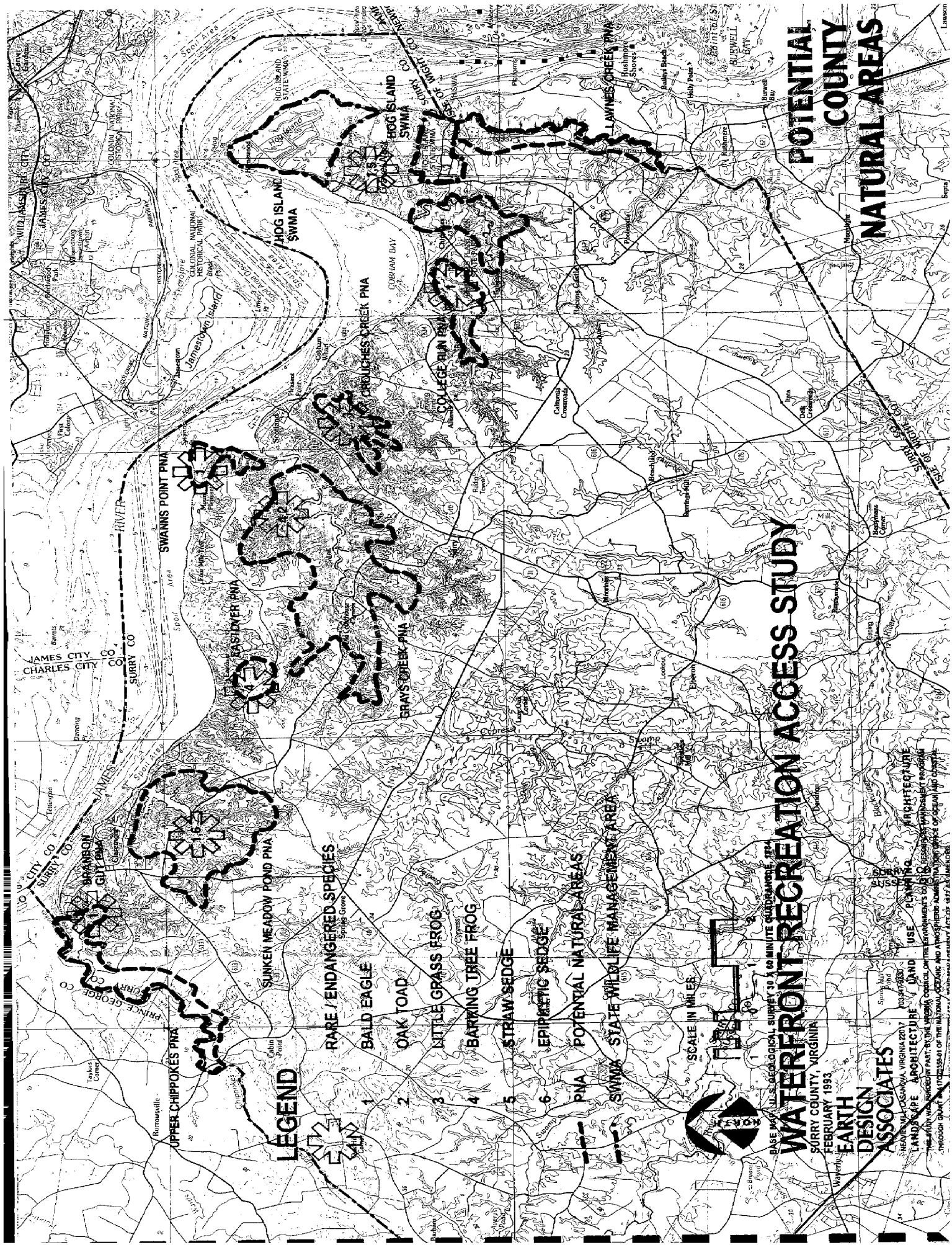
As a part of this study, the Commonwealth of Virginia, Department of Conservation and Recreation Division of Natural Heritage searched its biological conservation data base for occurrence of natural heritage resources defined as "the habitat of rare, threatened or endangered plant and animal species, rare or state significant natural communities or geological sites, and similar features of scientific interest." The search revealed the identity and approximate location of these resources as follows:

1) Hog Island Quadrangle. Haliaeetus leucocephalus (bald eagle, G3/S253/LE/LE) and Carex straminea (straw sedge, G5/S2/NF/NS) occur at Gravel Neck. Chippokes State Park also contains nesting areas in College Run.

2) Surry Quadrangle. Bufo quercicus (oak toad, G5/S3/NF/NS) has been documented at Timber Neck and has also been found with Hyla gratiosa (barking treefrog, G5/S1/NF/LT) at Cross Creek. Bald eagles also occur at Black Duck Gut on the Colonial National Historical Park.

3) Claremont Quadrangle. Bald eagles occur at Brandon Gut and Sunken Meadow Pond. The epiphytic sedge (Carex decomposita, G3G4/S1/3C/NS) also occurs at Sunken Meadow Pond. The barking treefrog occurs south of Eastover near route 610.

The several agencies which have made recommendations for protection, designation etc. with certain common elements but the recommended areas are not always the same. The following map combines the areas sited in all of the foregoing studies into potential county natural areas. All of these studies and agencies should be consulted when planning any facility or recreational activity related to natural area resources.

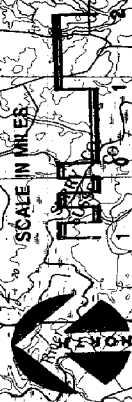


WATERFRONT RECREATION ACCESS STUDY

POTOMAC COUNTY, VIRGINIA
FEBRUARY 1993

**DESIGN
ASSOCIATES**

LANDSCAPE ARCHITECTURE / LAND USE PLANNING / ARCHITECTURE
10340-19330
117022355-01 OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE
THROUGH QUART. 117022355-01 OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE



LEGEND

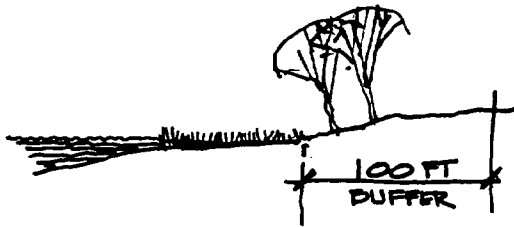
- 1 RARE / ENDANGERED SPECIES
- 2 BALD EAGLE
- 3 OAK TOAD
- 4 LITTLE GRASS FROG
- 5 BARKING TREE FROG
- 6 STRAW SEDGE
- 7 EPIPHEMIC SEDGE
- 8 POTENTIAL NATURAL AREAS
- 9 PNA
- 10 SWMA - STATE WILDLIFE MANAGEMENT AREA

POTENTIAL COUNTY NATURAL AREAS

RESOURCE PROTECTION AREAS (RPA)

The Chesapeake Bay Preservation Act requires all tidewater communities to map RPA's which are "areas which consist of sensitive lands at or near shorelines that have intrinsic water quality value due to the ecological and biological processes they perform, or are sensitive to impacts which may cause significant degradation to the quality of state waters."

The purpose of the RPA's is to protect the quality of water within each individual watershed and the Chesapeake Bay as a whole. The main areas designated are:



- Tidal and non-tidal wetlands and their shorelines.
- Any sensitive lands, especially those with environmentally intrinsic water quality value.
- 100-foot-wide buffers adjacent to the aforementioned RPA's.

The implication for water-related recreation is that facilities cannot be built within RPA's and buffer zones unless they are water-dependent. Examples of water-dependent facilities are marinas and bathing beaches. However, even within water-dependent facilities, components of these facilities which are not water dependent and don't already exist should not be located in the RPA, i.e. dry boat storage at a marina or a parking lot at a natural area. The RPA and 100 foot buffer are delineated on the following map.



LEGEND

2A CHESAPEAKE BAY PRESERVATION ACT RESERVE

100 FEET BUFFER ZONE

SCALE IN MILES



WATERFRONT RECREATION ACCESS STUDY

SURRY COUNTY, VIRGINIA

FEBRUARY 1993

EARTH
DESIGN
ASSOCIATES

BASE MAP: U.S. GEOLOGICAL SURVEY 30 x 60 MINUTE QUADRANGLE, 754
NEARBY LANDS: VIRGINIA 2207
LANDSCAPE ARCHITECTURE AND USE PLANNING ARCHITECTURE
THE NATIONAL SYSTEM OF PUBLIC LANDS
THROUGH GRANT 170208941 OF THE NATIONAL OCEANIC AND A LARGELY UNDEVELOPED TWO CORP. OF OCEANIC AND COASTAL
RESOURCE MANAGEMENT UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC 1623)



III. EVALUATION

Potential Recreational Activities
Activity/ Resource Compatibility
Recreational Activity Requirements

POTENTIAL WATERFRONT RECREATION ACTIVITIES

Considering the general kinds of waterfront recreation activities which will meet the needs and desires of Surry County residents and other users, the following list of potential waterfront activities was prepared. This list is divided into related activities such as fishing and boating and generally progresses from lower to higher intensity.

- **Boating**

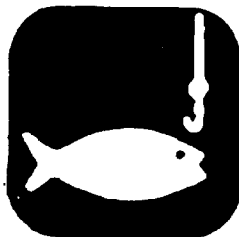


Small Boat Hand Launching. This activity includes canoes and other small boats which can be car-top carried and launched by one or two people without special in-water ramp provisions.

Medium Size Boat Launch With Ramp. This activity includes boats which are transported by trailer and are launched via in-water ramps with stabilized bottom conditions.

Marina. Marina activity includes "permanent" accommodations for larger boats; launching facilities and ramps for small, medium and large boats; and various levels of services including docking, fueling, etc.

- **Fishing/Crabbing**



Bank/Small Pier Fishing. Activities which include a small number of people gathered in any one area who are line or dip-net fishing or crabbing.

Medium Pier Fishing. Pier fishing of approximately 10 people in a larger water body, but probably not located in the James River.

Major Pier Fishing. Fishing in deeper water by larger numbers of people; likely located in the James River, or at the mouth of larger creeks.

- **Nature Study.**



Observation and/or study of marshes, wetlands, forests, habitats, etc.

- **Hiking.**

Pedestrian activities in natural areas.

- **Wilderness Camping.**

Activities which involve overnight stays in undeveloped areas.

- **Sightseeing.**

Activities of observing an individual view or vista; or the continual scenic nature of a corridor.

- **Beach Bathing.**

Activities which center around the sand beach/riverfront environments. This may include sunbathing, swimming, and related activities.

- **Historical Interpretation.**

Activities centering around visitation and interpretation of historical and archeological sites.

- **Picnicking.**

Outdoor eating and passive recreation, usually within easy reach of auto parking.

- **Hunting.**

As relates to waterfront recreational access, the taking of game species with bow and arrow or firearms within the limits of applicable laws, safety and sound environmental practices.

- **Water Skiing.**

Skiing behind power boats and jet skiing in safe, open-water conditions.

- **Sailing/Wind Surfing**

Sailing of small craft and wind surfing in safe, open water areas.

- **Scuba Diving.**

Diving with self-contained underwater breathing apparatus in safe areas of interest.

- **River Cruise.**

The commercial boat touring of the riverfront to observe and/or interpret scenic, natural or historic resources.

- **Camping.**

Overnight stays in areas developed with tent camping facilities.

- **RV Camping.**

Overnight stays in areas developed with sanitary and electric facilities for recreational vehicles.

- **Major Riverfront Tourist Activity.**

Waterfront activity designed to attract tourists and tourism to Surry County.

The key to providing successful recreational facilities which take maximum advantage of the resource for recreational benefit while protecting, preserving and, in some cases, enhancing this resource is in matching the needs, demands and impact of the activity with the characteristics, potential and holding capacity of the resource.

Obvious examples include matching nature study activities with natural areas, historic interpretation with historic sites and bathing beaches with flat riverfront sites. However, less obvious, but equally important are matching marina sites with areas where natural flushing action of the water body takes place.

The following chart matches activities with resources in a broad and general way, while the following section on recreational activities requirements addresses specific criteria and requirements which will take advantage of, and protect resources.

ENVIRONMENTAL COMPATIBILITY

	100 YR FLOOD	WETLANDS	RPA'S	SLOPES GREATER THEN 15%	HIGHLY ERODIBLE SOILS	NATURAL HERITAGE RESOURCES	SUBAQUEOUS/ MARINE/ SHORELINE COND.	HISTORICAL/ ARCHAEOLOGICAL RESOURCES
SMALL BOAT HAND LAUNCHING	○	○	○	○	○	○	○	○
MEDIUM BOAT RAMP	○	○	○	○	○	○	○	○
MARINA	○	○	○	○	○	○	○	○
BANK/ SMALL PIER FISHING	○	○	○	○	○	○	○	○
MEDIUM PIER	○	○	○	○	○	○	○	○
LARGE PIER	○	○	○	○	○	○	○	○
SIGHTSEEING	○	○	○	○	○	○	○	○
NATURE STUDY	○	○	○	○	○	○	○	○
NATURE TRAILS/ HIKING	○	○	○	○	○	○	○	○
SCENIC DRIVE	○	○	○	○	○	○	○	○
BEACH BATHING	○	○	○	○	○	○	○	○
HISTORIC INTERPRETATION	○	○	○	○	○	○	○	○
PICNICKING	○	○	○	○	○	○	○	○
HUNTING	○	○	○	○	○	○	○	○
WATER SKIING	○	○	○	○	○	○	○	○
SAILING/ WIND SURFING	○	○	○	○	○	○	○	○
SCUBA DIVING	○	○	○	○	○	○	○	○
RIVER CRUISE	○	○	○	○	○	○	○	○
WILDERNESS CAMPING	○	○	○	○	○	○	○	○
CAMPING	○	○	○	○	○	○	○	○
RV CAMPING	○	○	○	○	○	○	○	○



COMPATIBLE



CAN BE COMPATIBLE

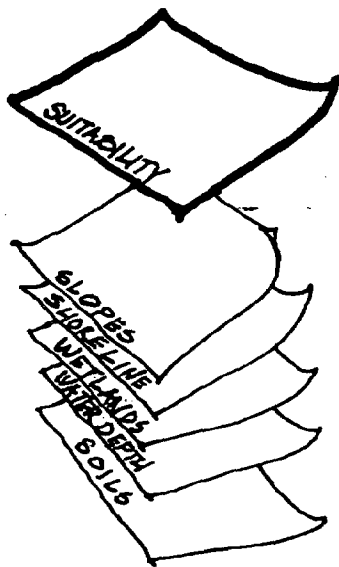


NOT COMPATIBLE

RECREATIONAL ACTIVITY REQUIREMENTS

Each recreational activity has a specific set of requirements which must be met in order for the activity to take place. These requirements must be understood and evaluated in a general way when looking at the areas where the activities might happen, and very specifically when evaluating a given site for its suitability. In the Recommendations section of this study, various locations in the County have been evaluated and generally found to be suited for the recommended activity. The next step beyond the study will be to focus on specific sites and evaluate them in terms of site requirements and environmental compatibility.

Because many activities listed in the "potential activities list" have similar characteristics and site requirements, in the interest of avoiding repetition, these activities have been grouped together in typical schematic plans. Some of these plans are very general and can apply to numerous locations, while others are site-specific as they respond to opportunities presented by a particular site. It should also be noted that individual recreational activities in the typical plans may occur without the other related activities, and conversely, some or all of the elements in the individual schematic plans could be combined together with other typical plans into a larger facility on a single site. This, in fact, has been recommended for selected sites discussed later.



The following are typical schematic plans and related site development criteria. Some or all of these plans share the following requirements:

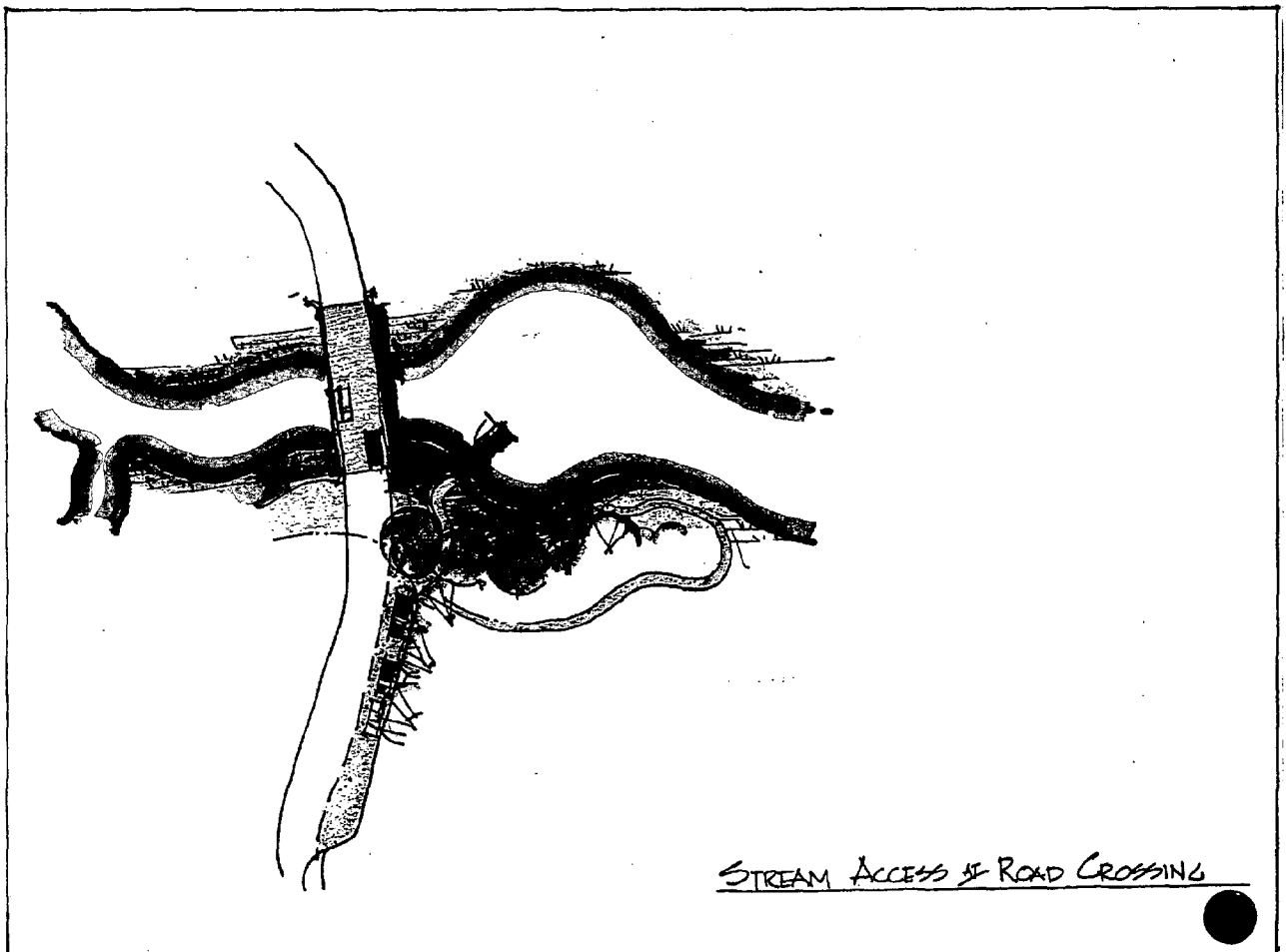
- All non-water dependent activities which are not already in RPAs should be located outside of these designated areas.
- Land-disturbing activity must be minimal even for waterfront-dependent uses within the RPA.
- All facilities must be handicapped accessible and conform to all requirements of the Americans With Disabilities Act of 1992.
- Dredging should not be more than one foot deeper than controlling depths in waterways.
- Dredging areas should be connected to natural channels of similar depth.
- Nesting/ spawning areas of endangered species must be avoided.

STREAM ACCESS AND ROAD CROSSING.

Major Activities: Hand boat launching/ bank and pier fishing.

Ancillary Activities: Nature study, observation areas, historic interpretation.

This plans combines the least intensive boating and fishing activities which share common requirements. The general needs include a safe place to pull off the road and unload a boat, parking within a reasonable walking distance, and protection of the RPA and water's edge from pedestrian erosion. As the title implies, these areas will be located where existing or future roads cross, or come close to streams or other water bodies. A logical, economical and least environmentally disruptive way to provide this type of access may be to attach platforms and structures to existing bridges. However, this approach is speculative and will require approval and coordination with the Virginia Department of Transportation.



Criteria / Requirements/ Components:

- Marsh walkway cannot damage environmentally sensitive areas.
- Bank fishing will not occur on soils with high erodibility potential or slopes.
- Bridge at road crossing
- Area for cars to pull off (shoulder parking).
- Hiking/ walking trail.
- Marsh bridge and/ or small pier.
- Path to marsh bridge/ pier.
- Picnic facilities.
- Option: Bridge catwalk.

Probable Cost:(Excluding Land)

- **\$6,800.00 - \$9,000.00**
- Shoulder Parking (5 spaces) 875.00 - 1,125.00
- Pathway (200 l.f. x 3' width stone dust) 500.00 - 800.00
- Nature Trail (1000 l.f. x 3' width) 250.00 - 500.00
- Walkway Pier (75 l.f. x 6' width) 4500.00 - 5625.00
- Picnic Table (1) 300.00 - 400.00
- Trash Receptacles (2) 400.00 - 500.00

BOAT RAMP AND/OR MEDIUM PIER

Major Activities: Launching mid-size boats, fishing.

Ancillary Activities: Nature study, picnicking, sight-seeing, historic interpretation.

These facilities should be evenly distributed throughout the County for easy access by all residents, and should be easily accessible from paved or well-maintained roads. The general location on the waterfront would be the lower one-third of the larger creeks, possibly in protected areas along the James River. They will require sufficient water depth, room for maneuvering and room for boats waiting to haul out, all without disturbing nearby marshes or sensitive shoreline areas. Sufficient land area to maneuver and back boat trailers must be provided. Pull-through parking spaces for trailers, and parking for single vehicles will be needed.



BOAT RAMP AND/OR MEDIUM PIER

Unless parking and other non-essential waterfront components of these activities already exist in the RPA, they should be located outside of it. Although saving natural vegetation and providing additional landscaping to screen vehicles, etc. is desirable, these areas should be kept somewhat open in character to facilitate policing and security. Porta-johns and easily maintained trash receptacles should be provided. Water-dependent components of these facilities which must be within the RPA must be designed to have the least impact on the shoreline. Areas for maneuvering and backing boat trailers should be clearly defined and physically restricted to the minimal area needed. Clearly defined pedestrian paths and, depending upon the nature of the shoreline, structures such as marsh bridges should be provided to protect plants, soils and sensitive areas from pedestrian erosion.

Criteria / Requirements/ Components:

- Waterway must be compatible with size of boats to be housed (i.e. width and depth)
- Good natural flushing must occur.
- Cannot be sited where physical or visual intrusion will threaten areas of high natural resource value.
- Water depth must be greater than 3' 0".
- Fishing and crabbing areas.
- Boat ramp with docking pier.
- Car/ trailer maneuvering to ramp.
- Parking for cars and cars with trailers.
- Porta-john facilities.
- Hiking/ Walking Trails.
- Water must be unsuitable for shellfish growth.
- Path to ramp/ Pier.
- Picnic facilities.

Probable Cost: (Excluding Land)

• **\$172,400.00 - 220,000.00**

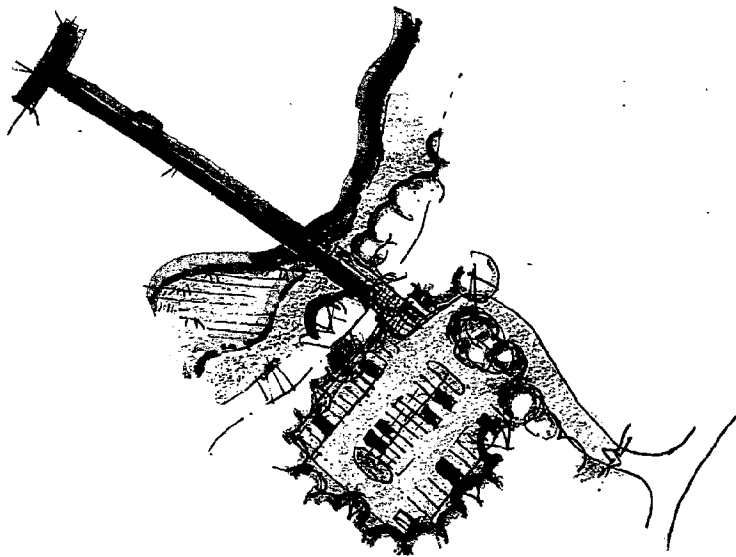
Parking and road (Gravel;15 spaces + 1000 l.f. x 24' width road)	16,500.00 - 28,500.00
Pathway (200 l.f. x 3' width stone dust)	500.00 - 800.00
Boardwalk(100 l.f. x 6' width treated wood)	6,000.00 - 7,500.00
Single boat ramp (1)	10,000.00 - 15,000.00
Pier (100 l.f. x 12' width)	125,000.00 - 150,000.00
Porta - john (2)	1,000.00 - 1,400.00
Trash Receptacles (4)	800.00 - 1,000.00
Picnic Tables (2)	600.00 - 800.00
Dredging (1000 l.f. x 2' deep x 20' wide)	12,000.00 - 15,000.00

MAJOR FISHING PIER

Major Activity: Fishing

Ancillary Activities: Picnicking, observation, nature study, archeological sites.

A primary fishing pier will likely be located along the James River, central to the residents of the County. Support functions of parking, etc. will be similar to the Boat Ramp/Medium Pier with the exception that there will be no need to get vehicles directly to the water's edge, thus reducing the potential impact on the RPA. The topographic conditions necessary for a boat ramp would not be applied to the large fishing pier. More parking spaces will be needed for individual vehicles, but pull-through parking spaces required by boat trailers, of course, will not be necessary. The same Porta-john, trash receptacle, policing, etc. requirements will also apply.



MAJOR FISHING PIER

Criteria/ Requirements/ Components:

- Waterway must be compatible with size of boats.
- Good natural flushing must occur.
- Cannot be sited close to areas of high natural resource value.
- Dredging not more than one foot deeper than controlling depths in waterway.
- Water depth must be greater than 3'0".
- Water unsuitable for shellfish.
- Maximum wave height of 1'0".
- Water current must be less than 1 knot.
- Unimportant for finfish spawning.
- Stabilization of shoreline by natural or planted vegetation or rip rap.
- Submerged aquatic vegetation must not be present.
- Suitable buffer to be maintained if adjacent to wetlands.
- Project will not affect, threatened or endangered species.
- Less than 50' to a navigable channel.
- Parking required.
- Porta-john facilities.
- Handicapped access.

Probable Cost:(Excluding Land)

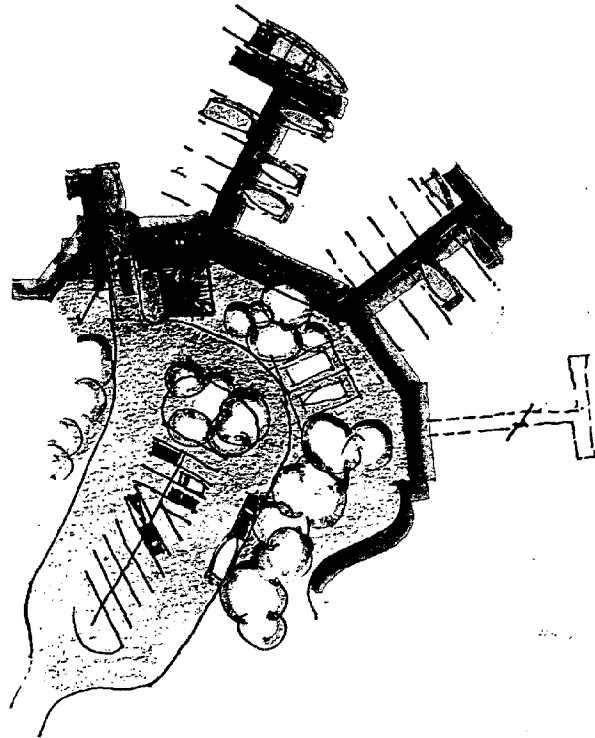
- **\$345,725.00 - 434,650.00**
 - Roads & Parking - Minimal grading(Gravel; 40 spaces + 2500 l.f. x 24' width road)
41,500.00 - 68,500.00
 - Path - Minimal grading (200 l.f. x3' width - stonedust)
500.00 - 800.00
 - Trails - Minimal grading(2000 l.f. x 3' width)
625.00 - 1250.00
 - Pier (200 l.f. x 12' width)
300,000.00 - 360,000.00
 - Trash Receptacles (6)
1,200.00 - 1,500.00
 - Picnic Table (3)
900.00 - 1,200.00
 - Porta-john (2)
1,000.00 - 1,400.00

MARINA

Major Activity: Boat launching, boat docking, fueling service, wet and dry storage of boats.

Ancillary Activities: Fishing, picnicking.

Marinas are one of the most intensive and potentially environmentally damaging activities along the waterfront. Therefore, their location and design is extremely important. Generally speaking, they should be located on a large creek, in a protected area, close to the river where large boat activity takes place. Although a marina could be built directly on the James River, such a location would not be considered ideal because wave conditions would have to be mitigated by expensive breakwaters. The marina land area should be easily accessible and have sufficient room to maneuver and launch boats from large vehicles and boat trailers.



MARINA

Parking of these and other vehicles, as well as dry storage area for boats, should be outside the RPA wherever possible. Because of the intensity of boating use, some type of shore protection is usually required. The type of protection must be determined on a site-specific basis.

Minimal services provided at a marina should include docking for resident and visitor boats, refueling for gas and diesel, a pump-out station with sufficient sewage disposal, a general store, and rest rooms. The best location for marinas are on points of land rather than the inside bend of a stream as the boating activity at the point will have less impact on the shoreline. The width and size of the water area in front of the marina is also important and should be in proportion to the number of boats coming in and out at any one time.

Points of land also provide better flushing action by the natural water body which is an essential characteristic in siting a marina.

It is generally thought that using existing or former marina sites will be desirable because they will have the least additional impact on the RPA. This must also be evaluated on a site-by-site basis. In any marina situation, best management practices should be strictly applied and enforced to minimize environmental impact.

Criteria/ Requirements/ Components:

- Physical dimensions and characteristics of the water body should be compatible with the size of the marina and type of vessels.
- Marinas must have sufficient upland area to provide all necessary parking, stormwater management BMPs, fuel, and sanitary facilities without filling wetlands or subaqueous lands.
- Marinas should be located in areas with good natural flushing.
- Marinas should not be sited close to areas of high natural resource value such as shellfish beds, seagrass communities and areas frequented by endangered species.

- Access channel dredging should be limited to the minimum dimensions needed for navigation and should also avoid sensitive areas (i.e. wetlands, shellfish grounds, and seagrass beds).
- Dredged material disposal areas should be clearly defined and designated.
- Piers and wharves crossing vegetated wetland and seagrass areas should be limited to the minimum necessary for water access.
- Where vegetated areas are crossed, the height of the pier above the substrate should be equal to one foot less than its width with a three-foot minimum required.
- Site-specific stormwater management BMPs are required.
- A solid waste disposal (and recovery) plan with facilitated marina user access.
- Sanitary facilities and pumpout facilities convenient to marina users.
- All fuel facilities must incorporate automatic shutoff valves and must have spill contingency plans.
- Methods of insuring against the discharge of wastes, gray water, fuels, bilge wastes.
- Facilities incorporating boat maintenance operations shall include plans for the efficient collection and removal of sand-blasting material, paint chips, and other by-products of maintenance operations.
- Parking for cars and cars with trailers.
- Fueling facility.
- Single boat ramp.
- Car/ trailer maneuvering to ramp.
- Porta-john facilities.
- Pier/ dock with boat slips.
- Boat docking.
- Pathway to dock.
- Dry storage for boats.
- Picnic facilities.

Probable Cost: (Excluding Land)

• **\$284,900.00 - 430,200.00**

Stone/ Office/ Restrooms

100,000.00 - 150,000.00

Parking and Roads (gravel; 40 spaces +
2500 l.f. x 24' width road)

41,500.00 - 68,500.00

Fuel Facility (1)

4,000.00 - 6,000.00

Single Boat Ramp (1)

10,000.00 - 15,000.00

Pathway (200 l.f. x 3' width stone dust)

500.00 - 800.00

Pier with boat slips (300 l.f. x 12' width) +
(20 boat slips)

93,500.00 - 140,500.00

Dry storage for boats (10 boats)

20,000.00 - 30,000.00

Trash receptacles (8)

1,600.00 - 2,000.00

Picnic Tables (6)

1,800.00 - 2,400.00

Dredging (1000 l.f. x 2' deep x 20' wide)

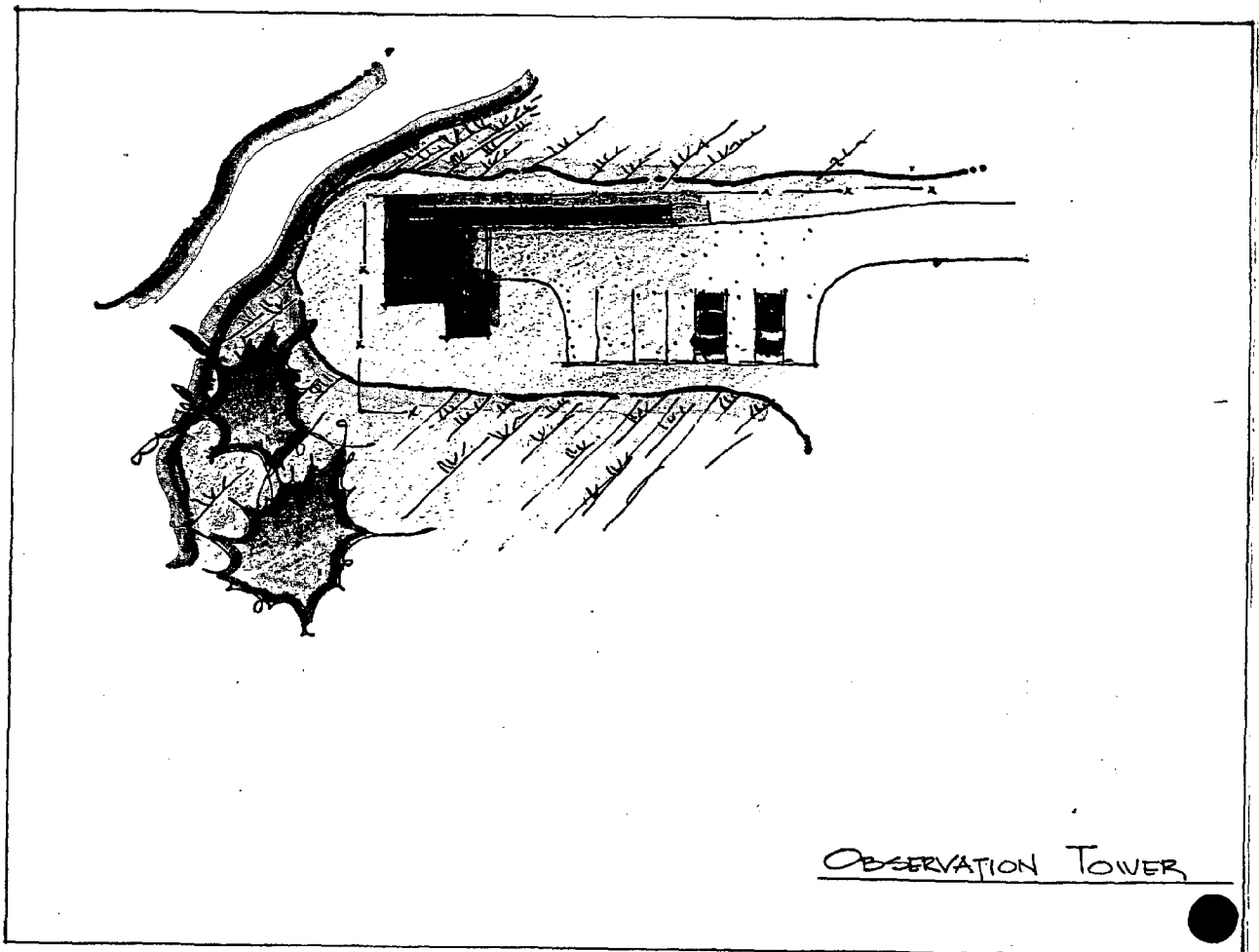
12,000.00 - 15,000.00

OBSERVATION AREA/ TOWER

Major Activity: Sightseeing, nature study.

Ancillary Activities: Bank/small pier fishing, picnicking, historic interpretation.

The observation tower is a response to site condition which requires an elevated perspective to gain views of significant scenic, natural, or other resources. This may be a condition such as the fencing at the mouth of Brandon Gut, or getting above dense underbrush at the water's edge in natural areas. The structure would be pole-type construction to minimize site and environmental impact. Parking may be close or remote depending upon the specific location of the tower.



Criteria/ Requirements/ Components:

- Access to be only within parking area, trails, and observation areas.
- Foot bridges must be built over marshes/ wetlands.
- Observation platform at 8' 0"+ height.
- Limited parking provided.
- Path to observation platform.
- Picnic facilities.

Probable Cost: (Excluding Land)

- **\$27,750.00 - 41,300.00**

Roads & Parking (Gravel; 10 spaces + 1000
l.f. x 24' width road)

16,000.00 - 26,500.00

Wooden observation platform

8,000.00 - 10,000.00

Boardwalk (50 l.f. x 6' width)

3,000.00 - 3,750.00

Pathway (100 l.f. x 3' width; stone dust)

250.00 - 400.00

Trash receptacles (1)

200.00 - 250.00

Picnic tables (1)

300.00 - 400.00

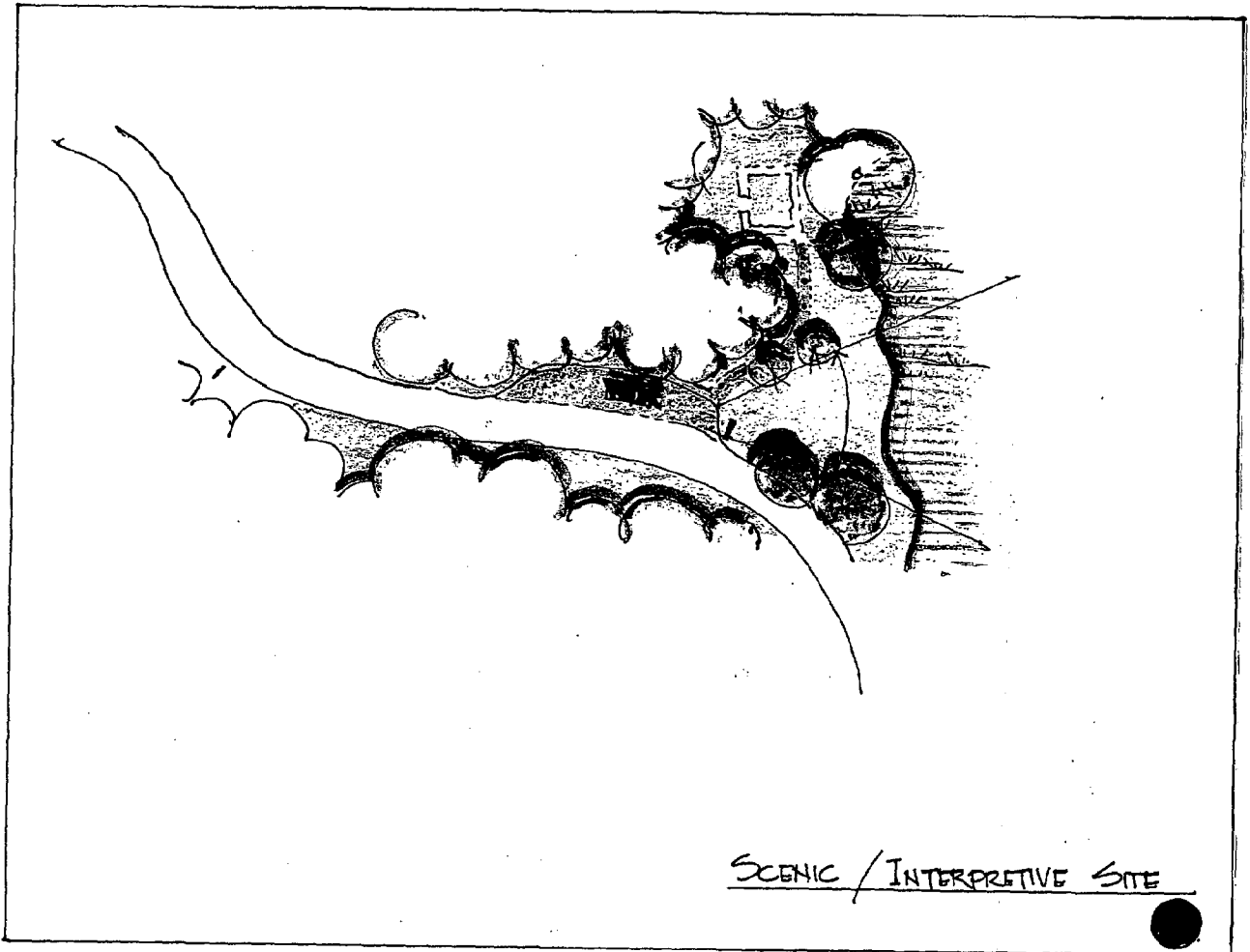
SCENIC/ INTERPRETIVE SITE

Major Activities: Observation, historic interpretation, nature study.

Ancillary Activities: Picnicking, hiking, fishing.

These are small, roadside areas to be provided in response to a given opportunity such as a significant view, wildlife observation area, archaeological site, etc.

They will have minimal pull-off parking, pedestrian paths or trails, interpretive signs and displays, easily maintained trash receptacles, and provisions for easy policing and surveillance.



Criteria/ Requirements/ Components:

- Natural areas must provide educational and interpretive opportunities.
- Avoid areas with high soil erodibility.
- Do not interact with threatened or endangered species.
- Interpretive signs.
- Shoulder parking.
- Hiking/ Walking trail.
- Picnic Facilities.
- Located in areas with extensive natural resources.
- Historic site and/or natural point of interest.
- Pull off required.

Probable Cost: (Excluding Land)

- **\$3,350.00 - 5,200.00**

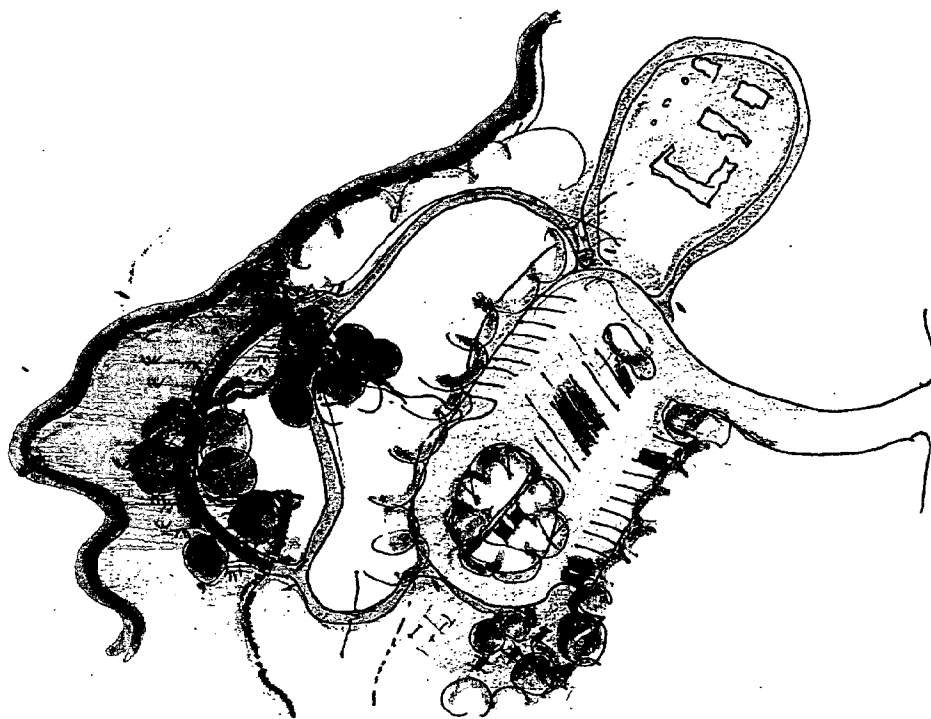
Shoulder parking (four cars)	700.00 - 900.00
Trail (2000 l.f. x 3' width)	500.00 - 1,000.00
Interpretive signage (5 signs)	750.00 - 1,500.00
Trash receptacles (4)	800.00 - 1,000.00
Picnic tables (2)	600.00 - 800.00

MAJOR NATURAL AREA ACCESS

Major Activities: Nature study.

Ancillary Activities: Sightseeing, historical interpretation, hiking, wilderness camping.

These facilities will be located at or near significant marshes, wetlands, forests, habitats, or other natural area resources. They will include a parking area which will accommodate buses and automobiles, rest rooms, trash receptacles; potable water and shower facilities would be desirable. Depending upon further study, the inclusion of a small nature center/classroom/laboratory might also be considered. Marsh bridges, observation towers, other site-responsive structures will be needed to protect the natural area, while providing maximum visual and study access to the resource. Canoe access will also be provided if appropriate, as will remote, primitive camping areas. Protection of the resource will be the foremost consideration in developing facilities.



MAJOR NATURAL AREA ACCESS

Criteria/ Requirements/ Components:

- Natural areas must provide educational and interpretive opportunities.
- Must be areas already coexisting with some level of human influence.
- Avoid areas with high soil erodibility potential.
- Must not be in an areas where users interact with threatened or endangered species.
- Large parking area.
- Trails, footbridge as necessary.
- Interpretive signage.
- Rest room facilities.
- Concessions.
- Option: Nature center.
- Picnic facilities.

Probable Cost: (Excluding Land)

- **\$246,000.00 - 331,000.00**

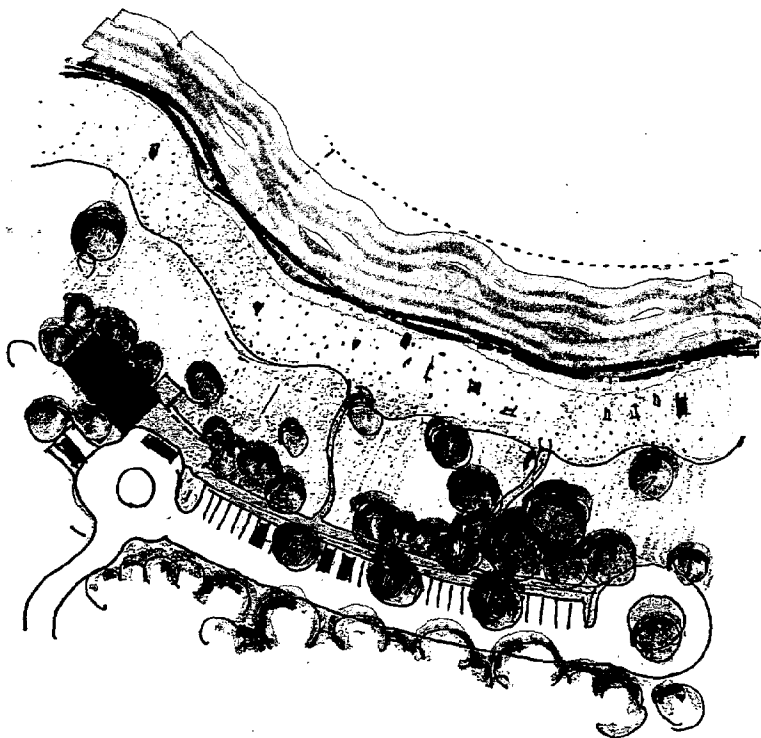
Trail (4000 l.f. x 3' width)	1,000.00 - 2,000.00
Interpretive signage (10 signs)	1,500.00 - 3,000.00
Roads & Parking (Gravel; 75 spaces + 2000 l.f. x 24' width road)	35,000.00 - 42,500.00
Restrooms (1 set)	35,000.00 - 42,500.00
Concession Facilities (1)	40,000.00 - 52,500.00
Nature Center (1)	20,000.00 - 30,000.00
Trash receptacles (15)	3,000.00 - 3,750.00
Marsh Bridges/ Boardwalk (1500 l.f. x 6' width pressure treated)	90,000.00 - 112,500.00
Observation Tower (1)	8,000.00 - 10,000.00
Potable Water Supply (1)	7,000.00 - 10,000.00
Picnic Tables (10)	3,000.00 - 4,000.00

BATHING BEACH

Major Activities: Sun bathing, swimming, small boat use, sailing, wind surfing, picnicking and pick-up games.

Ancillary Activities: Hiking, sightseeing, nature study, historical interpretation, camping, RV camping, water skiing, boat launching, small/ medium/ major fishing pier, sailing/ wind surfing.

Bathing beaches would be located along the James River in accessible areas where natural conditions facilitate these activities. Facilities would include a large parking lot for automobiles, buses and recreational vehicles, a bath house/ concession building and perhaps a seasonal caretaker's residence. Other facilities would include a buffer zone between parking and a sand beach which would likely be a grassy area for horseshoes, pick-up games, etc. and picnicking in a variety of shaded and sunny locations.



BATHING BEACH

The beach area should be as wide as is feasible and free of obstructions. Swimming may or may not be allowed depending upon water quality, the nature of the river bottom, water depths, local currents, etc. If swimming is permitted, it will be in a clearly designated area with proper lifeguard and rescue facilities. Access control will also be needed at this facility. Depending upon exact location, the bathing beach area has potential of expanding into a major waterfront park which could fulfill much of the County's "active" waterfront recreation needs in one facility. In this case, many of the ancillary activities listed above would be included.

Criteria/ Requirements/ Components:

- Minimum beach size - 100' width with 100' available swimming water (per Virginia Outdoors Plan).
- Cannot occur in marshes/ tidal flats.
- Must occur in areas absent of endangered or threatened species.
- Water depths must meet swimming requirements.
- Water bottom must be safe for swimming.
- Submerged aquatic vegetation must not be present.
- Can not occur in heavily traveled boat lanes.
- Good transportation network and secondary road system to the site location.
- Beach areas should receive sand deposition.
- Must occur in area with natural protection for beach resource.
- Large parking areas.
- Interpretive signage.
- Path to beach area.
- Restrooms/ changing rooms/ bath house.
- Concessions.
- Camping facilities.
- Life guard station.
- Swimming platform.
- Green/ open space.
- Multipurpose field & courts.
- Picnic facilities.

Probable Cost: (Excluding Land)

• **\$223,000.00 - 335,500.00**

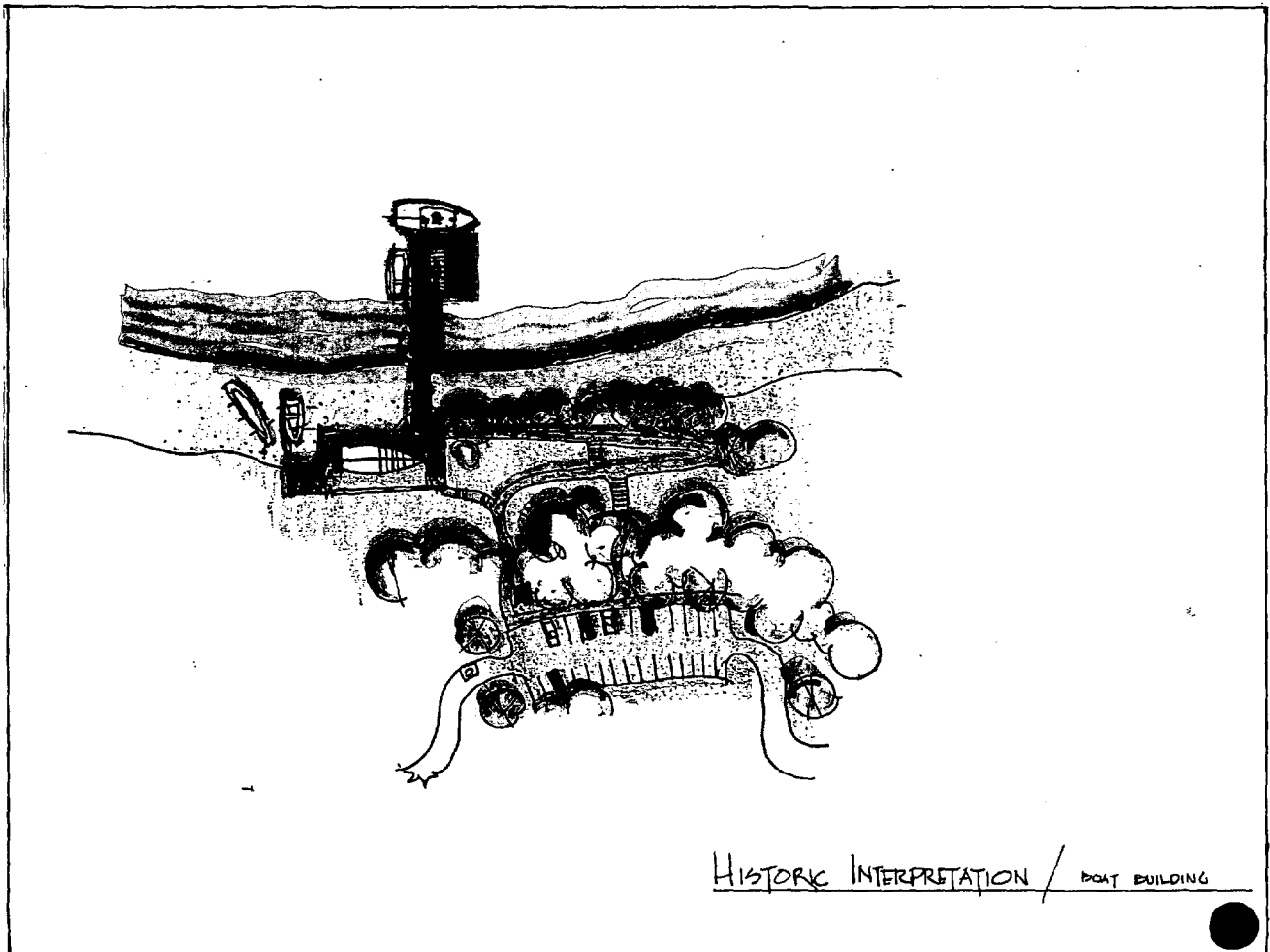
Beach area (1)	20,000.00 - 30,000.00
Picnic Tables (10)	3,000.00 - 4,000.00
Picnic Shelters (3)	10,000.00 - 15,000.00
Multi- Purpose Court (2)	7,000.00 - 10,000.00
Bath House (1)	35,000.00 - 50,000.00
Concession Facilities (1)	40,000.00 - 50,000.00
Roads and Parking (120 spaces + 5000 l.f. x 24' width road)	87,000.00 - 143,000.00
Interpretive Signage (10 signs)	1,500.00 - 3,000.00
Pathways (1000 l.f. x 3' width: stone dust)	2,500.00 - 4,000.00
Camping facilities (electric/ water hook up) (30 sites)	10,500.00 - 18,000.00
Trash receptacles (20)	4,000.00 - 5,000.00
Swimming Platform (1)	2,500.00 - 3,500.00

MAJOR HISTORIC INTERPRETATION

Major Activity: Historic interpretation/ tourist attraction.

Ancillary Activities: Sightseeing, nature study, picnicking, river cruise.

These facilities are an expansion upon historic/ interpretive sites already discussed in that they provide exhibits, displays, demonstrations, reconstructions, etc. for the purpose of interpreting the history of the waterfront in Surry County. They would be located at or near major historical sites which are tourist destinations. Parking, rest rooms and other tourist services are needed here, or nearby. The displays, etc. should be easily accessible to the handicapped and disabled since they will be major attractions for the general public. The example used in the schematic is a colonial boat-building facility; however, the theme could be logging, railroads, or other historical subjects depending upon the site and the opportunity presented.



Criteria/ Requirements/ Components:

- Located at or near sites of historical significance.
- Must be near waterfront.
- Historical interpretive signage.
- Parking facilities.
- Porta-john facilities.

Probable Cost: (Excluding Land)

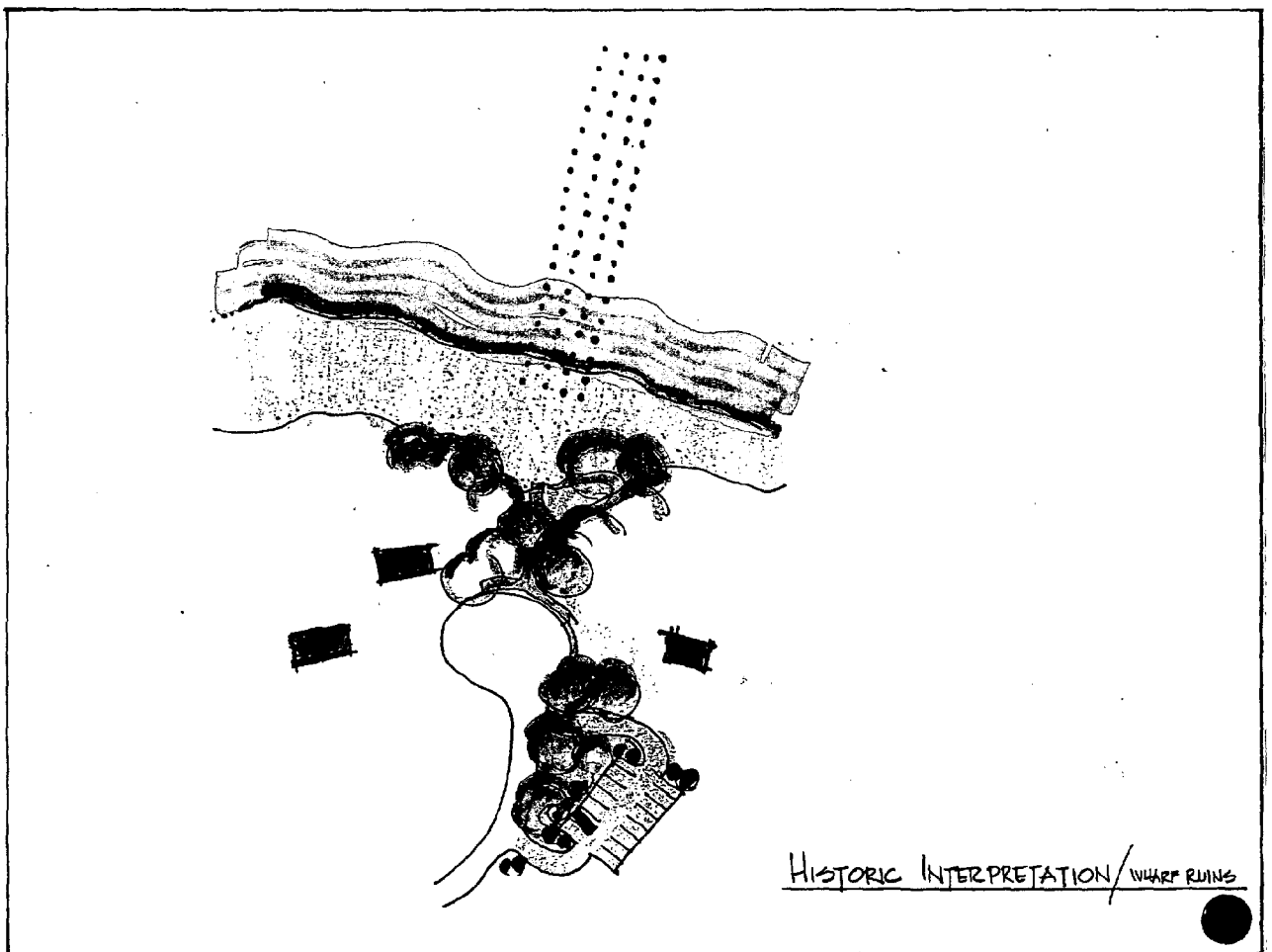
- **Boat Building - \$44,225.00 - 73,050.00**
 - Roads & parking - minimal grading (Gravel;
30 spaces + 2500 l.f. x 3' width road
40,500.00 - 67,000.00
 - Path - minimal grading (200 l.f. x 3' width;
stone dust)
500.00 - 800.00
 - Trails - minimal grading (2000 l.f. x 3' width)
625.00 - 1,250.00
 - Interpretive signs (6)
900.00 - 1,800.00
 - Trash receptacles (4)
800.00 - 1,000.00
 - Picnic tables (3)
900.00 - 1,200.00

HISTORIC INTERPRETATION/ RUINS

Major Activities: Historic interpretation.

Ancillary Activities: Sightseeing, hiking, bank fishing.

These facilities are specific responses to historical waterfront features which are in ruin and are not likely to be rebuilt, yet have a very high interpretive value in terms of local history. They are very closely related to the Scenic/Interpretive sites, but focus on the conditions of specific ruins which, because they are on private beach property, are not likely to be directly accessible to the public. They may have a small parking area with a path to a viewing area with interpretive signs.



Criteria/ Requirements/ Components:

- Should occur in areas of historical significance.
- Small parking lot.
- Interpretive signage.
- Hiking/ walking trails.
- Marsh walk/ bridge (if necessary)
- Picnic facilities.

Probable Cost: (Excluding Land)

- **\$45,300.00 - 71,100.00**

Roads & Parking - minimal grading (Gravel;
30 spaces + 2,000 l.f. x 24' width drive)

33,000.00 - 54,500.00

Path - minimal grading (250 l.f. x 3' width:
stone dust)

625.00 - 1,000.00

Trails - minimal grading (150 l.f. x 3' width)

375.00 - 750.00

Interpretive Signs (6)

900.00 - 1,800.00

Marsh walk/ board Walk (150 l.f. x 6' width)

9,000.00 - 11,250.00

Trash receptacles (4)

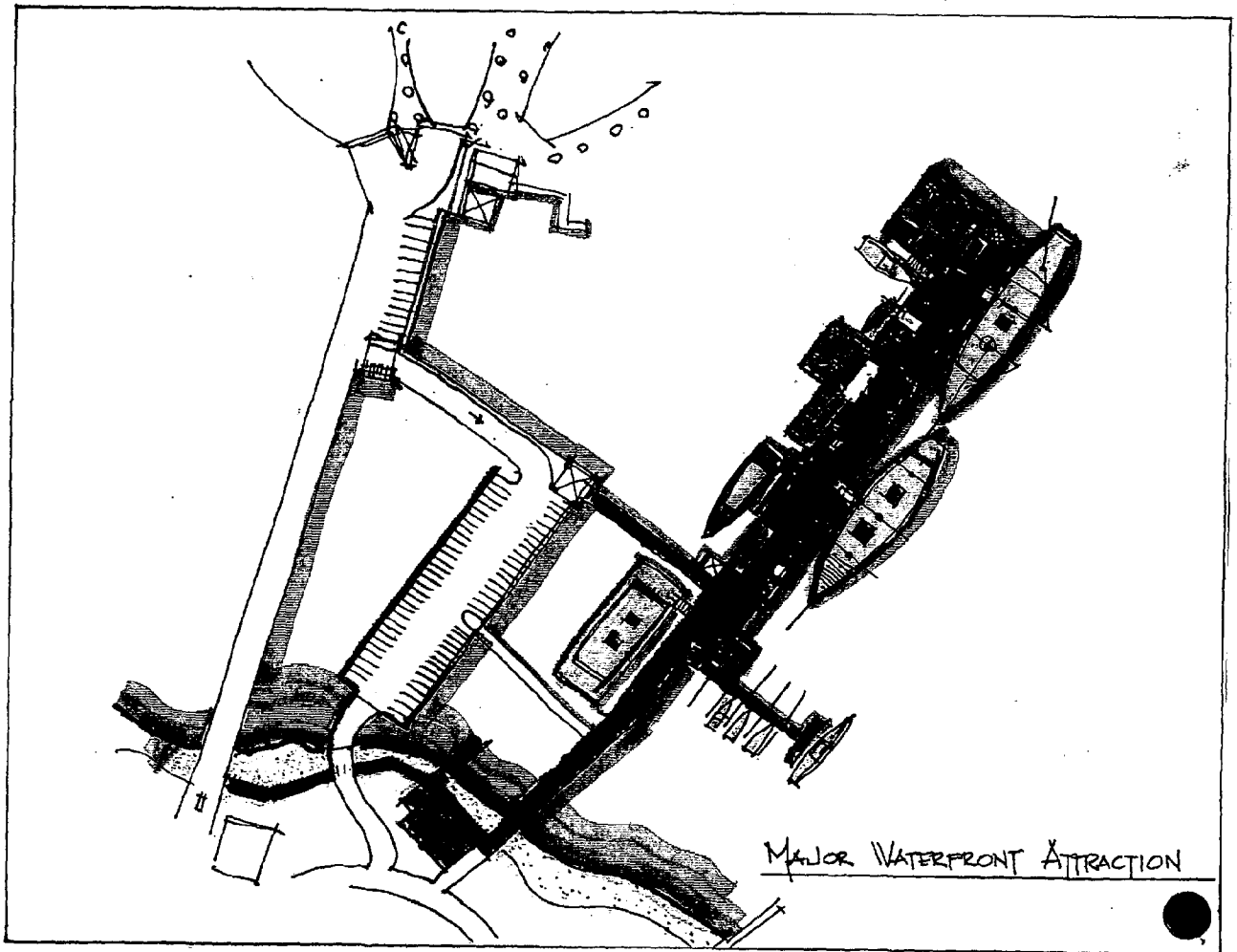
800.00 - 1,000.00

Picnic tables (2)

600.00 - 800.00

MAJOR WATERFRONT ATTRACTION

The major waterfront attraction is intended to be a tourist destination from the Yorktown/ Williamsburg/ Jamestown area, and a tourist's introduction into Surry County. The underlying theme is the recreation of a "turn of the century" wharf environment which might have existed in Scotland during that period. It would be a very festive atmosphere with facilities which could include a museum, dock, reconstructed schooners, shops, a floating restaurant, dock for visiting boats, etc. Because of the very nature of the idea, a lot of the facility would have to be built over the water. Major parking and support facilities would be beyond the waterfront, outside of the RPA.



Criteria/ Requirements/ Components:

- Must be near waterfront.
- Good natural flushing must occur.
- Cannot be sited where it will damage areas of high natural resource value.
- Water must be unsuitable for shellfish growth.
- Must be an unimportant area for finfish spawning.
- Stabilization of shoreline to be provided by natural or planted vegetation or rip rap.
- Submerged aquatic vegetation must not be present.
- A suitable buffer must be maintained.
- Project will not affect threatened or endangered species.
- Should be compatible with existing land and water uses.
- Large parking area.
- Concessions.
- Boat/ ship docking.
- Path to attraction.
- Dock facilities.
- Boardwalk/ bridge/ pier.
- Picnic facilities.
- Options:
 - Museum.
 - Reconstructed schooners.
 - Restaurant.
 - Shops.

Probable Cost:(Excluding Land)

- **\$1,051,600.00 - 1,481,550.00**

Roads & Parking - minimal grading (Gravel;
100 spaces + 2500 l.f. x 24' width road)

47,500.00 - 77,500.00

Path - minimal grading (200 l.f. x 3' width
stone dust)

500.00 - 800.00

Museum (1)

150,000.00 - 200,000.00

Shops (4)

400,000.00 - 500,000.00

Restaurant

300,000.00 - 500,000.00

Dock facilities (10 boat slips)

47,000.00 - 70,000.00

Boardwalk (1500 l.f. @ 6' width)

90,000.00 - 112,500.00

Trash receptacles (15)

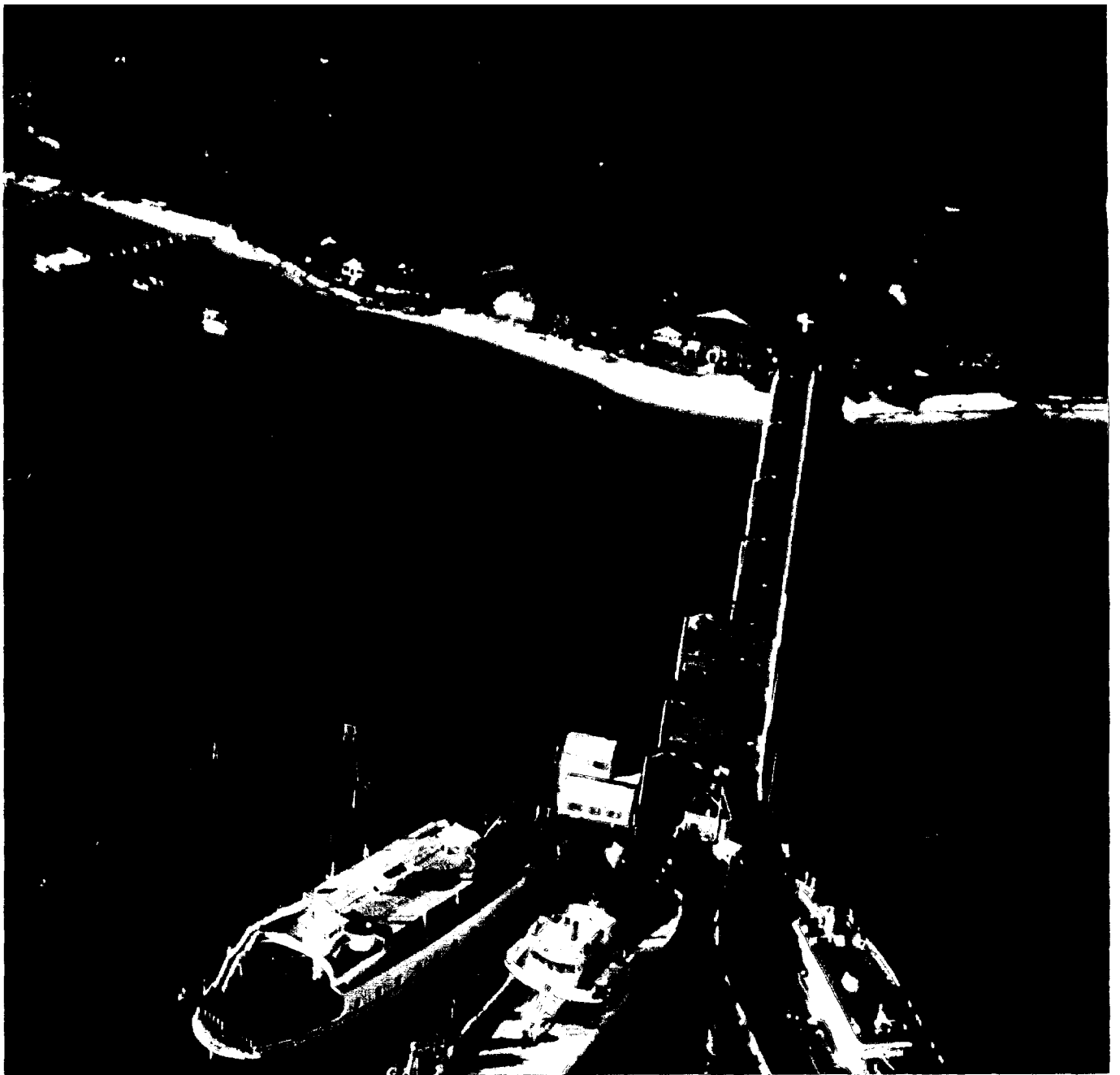
3,000.00 - 3,750.00

Picnic Tables (8)

1,600.00 - 2,000.00

Dredging (1000 l.f. x 2' deep x 20' wide)

12,000.00 - 15,000.00



IV. RECOMMENDATIONS

Overall Recommendations
Opportunity Area Recommendations
Implementation Strategies
Priorities
Funding Sources
Permits

The study has, thus far, looked at and analyzed existing conditions and resources, identified potential recreational activities, evaluated the compatibility of resources with potential activities and presented various scenarios for facility development in the form of schematic plans and development criteria.

This section of the study will focus on recommendations. The first will be General Recommendations which will pertain to providing waterfront recreation as a whole. This will be followed by Area Opportunity Recommendations, focusing on places around the county which appear to have potential for waterfront recreation, and what that potential is. Next will be recommended strategies for providing waterfront recreation followed by Priorities, possible Funding Sources and finally a Recommended Site Development and Permitting process.

GENERAL RECOMMENDATIONS

It should be sufficiently well established at this point that Surry County has a wealth of water-related resources and therefore, potential to provide a wide variety of recreational activities and facilities to county residents, neighboring areas and tourists alike. To realize this potential, the following general recommendations are important.

PUBLIC AWARENESS

In the discussion of existing waterfront recreational activities at various locations around the county, it was pointed out that there is a general lack of awareness on the part of county residents about recreational opportunities which already exist. It is therefore recommended that the County increase its public awareness efforts. This could be done through the production and publication of a "Recreational Opportunities in Surry County" brochure which could outline, by place and type of activity, what is generally available in the County with a special section on water-related recreation. This could be augmented with a periodic Parks and Recreation newsletter which reminds people of what is available and informs them of special events, etc. it could be further reinforced



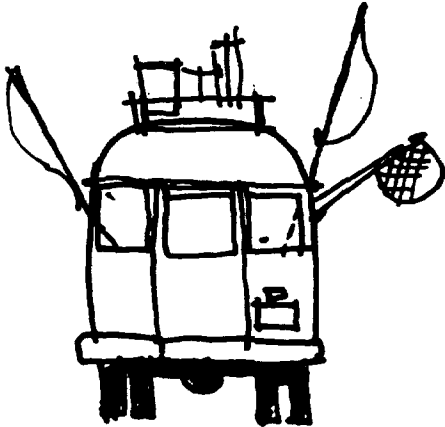
through agreements with local news paper(s) for a weekly "What's Happening In Recreation This Week" column or section. Public awareness cannot be over-emphasized in delivering recreational services.

PROGRAM DEVELOPMENT

Recreational programs are as important as recreational facilities; and the two go hand-in-hand. Many additional water-related recreational opportunities can be made available simply through the establishment of programs. These programs can be designed to take advantage of facilities already in the county or other locations.

Typical examples of these programs include:

- Monthly nature study hikes at Hog Island.
- Small boat fishing charter from Grey's Creek Marina or Tyler's Beach.
- Bus trips to the Charles City County fishing pier.
- A recreational bus tour of waterfront ruins.
- Head boat fishing charter out of Tyler's Beach.
- Day or week trip to Virginia Beach.



Programs are basically the only means of providing some recreational opportunities which don't currently exist in the county until sites can be identified, acquired, and facilities developed.

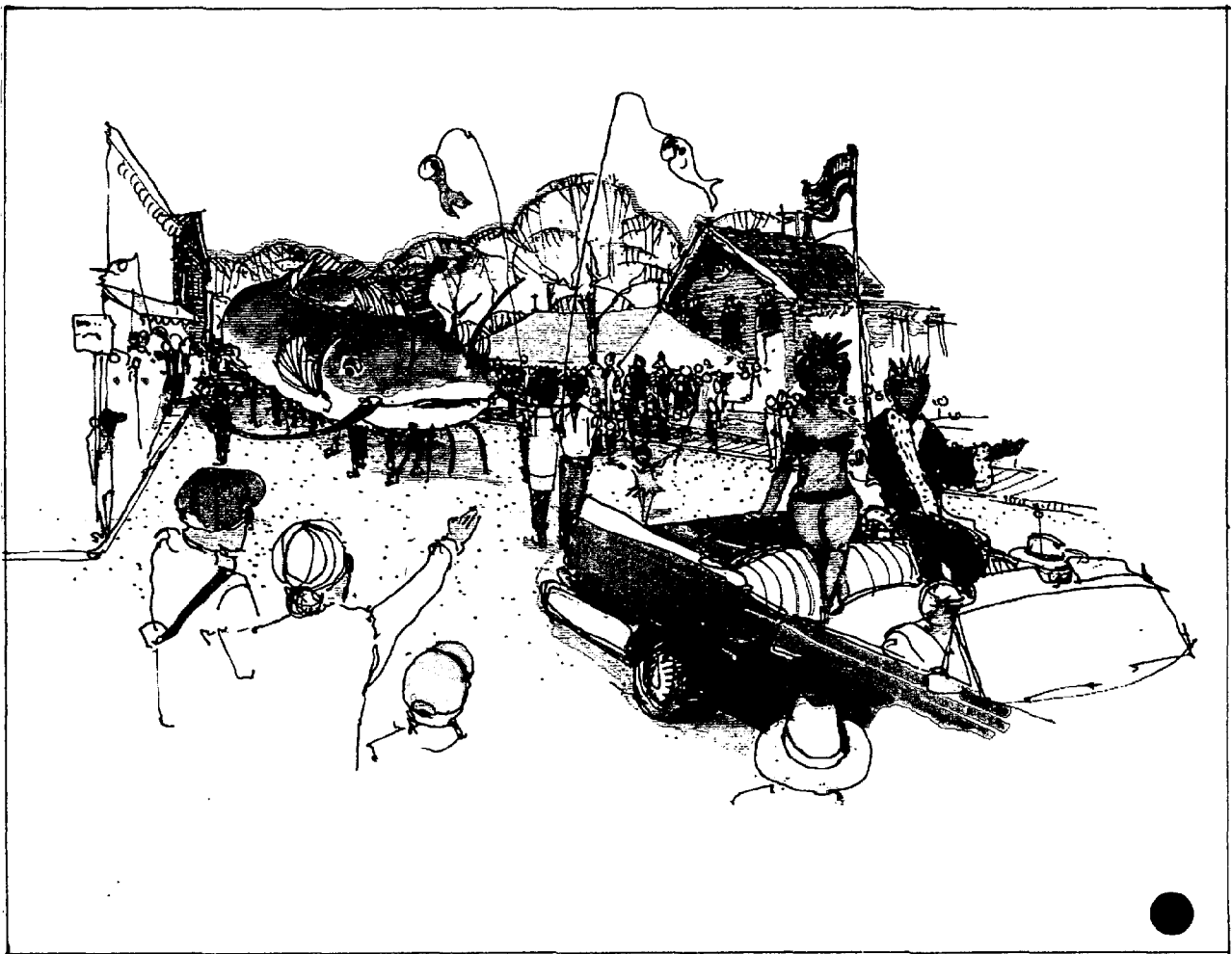
SPECIAL EVENTS

Special events are major programs which could add a new dimension and vitality to recreation in the County. These events could be planned to provide extra recreational opportunities to county residents while attracting tourists and tourist dollars from outside the area.

Several special events come to mind which could become annual occasions:

- **Catfish Tournament/ Festival**

Catfishing has become very popular in recent years and is perhaps, the most popular kind of fishing in the county. A tournament centered around this activity could attract much interest and generate a lot of fun. The tournament could last over a one-week period and culminate in a weekend festival with trophies for various categories of catches, a catfish parade, the crowning of a "king" catfish, a catfish fry and so on.



- Waterfowl Festival

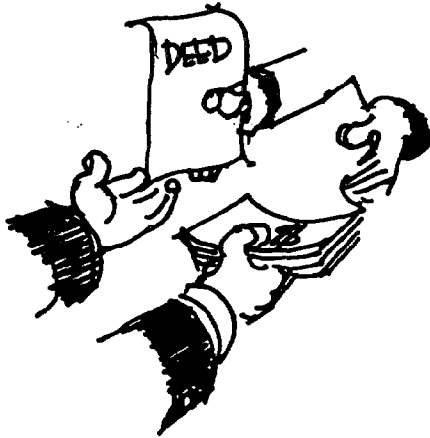
The migration of waterfowl is already an event which attracts many visitors to Surry County, specifically to Hog Island. This could easily be turned into a celebration and annual event featuring a waterfowl art show, decoy carving competition and perhaps a conference at Chippokes centered around wetlands, marine resources, and other water-related issues.

Of course, the festivals have to be very well planned and promoted for the first several years, but they are very popular and lucrative events for a locality once they get established. Some of the older, more successful festivals of this kind in Virginia are the Oyster festival in Urbanna, the Maple festival in Monterey, Boardwalk art show and the festival in Virginia Beach. These localities would be valuable resources for planning such a festival.

ASSESSMENT OF PUBLIC NEED

The county should conduct a general needs assessment and continually monitor the recreational needs and desires of its residents. As part of this study, the preparation of a county-wide survey of recreational needs has been initiated and will be conducted with the assistance of the State Department of Conservation and Recreation using their PASS Computer survey system. Once this survey is conducted, the county will be able to focus more directly on what county residents know about existing water-related recreational opportunities and what they want.

Following the survey, the county should continue to monitor its citizens through questionnaires, telephone surveys and feedback from elected and appointed representatives.



LAND ACQUISITION

The major obstacle to the County being able to provide water-related recreational facilities is its total lack of ownership of waterfront property. The acquisition and use of property will be addressed in the strategies section which follows, but its importance is worth noting as a major general recommendation.

The county should establish a specific program within its planning department to monitor the availability of waterfront property and evaluate suitability for the various development scenarios presented earlier.



RESOURCE PROTECTION

The wealth of opportunities for water-related recreation are directly dependent upon the resources identified and analyzed in this study and their protection. Everything which is done in the county should be evaluated in light of its long-term effects on these resources, rather than short-term gain. These resources hold the key to the future of Surry County.

TOURISM

Tourism is a subject which goes far beyond the scope of this study, but is so closely tied to waterfront recreation that it must be addressed. Tourism, as an industry, would appear to be a very logical future direction for Surry County and is recognized as such in the Comprehensive Plan. The presence of some of the most historical sites in the country and the abundance of natural areas would make Surry a prime location for such an industry. Over a million tourists a year visit the Williamsburg/Jamestown/ Yorktown area just across the river.



Although not all of the tourists who visit there will come over to Surry, a sizable number would be attracted by the ferry ride, a major waterfront feature at Scotland, the county's historic sites, its natural areas, and the rural ambiance of the county as contrasted with the hustle and bustle and crowded conditions which now characterize the Williamsburg area. The "area opportunity recommendation" section of the study discusses this proposal.



In recent years, a phenomenon has emerged on the national and international scene known as ecotourism. Because it is so new, it is still grappling for a definition. In a "nutshell" it is tourism built around the idea that people in urban and "built" environments want to experience natural environments.

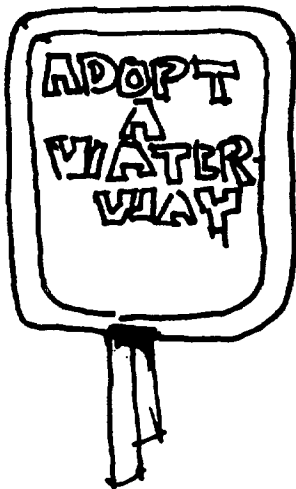
Even without encouragement, Surry is beginning to see an influx of visitation from the more densely populated urban areas to the east, despite the fact that the vast majority of its natural area resources are inaccessible to these visitors.

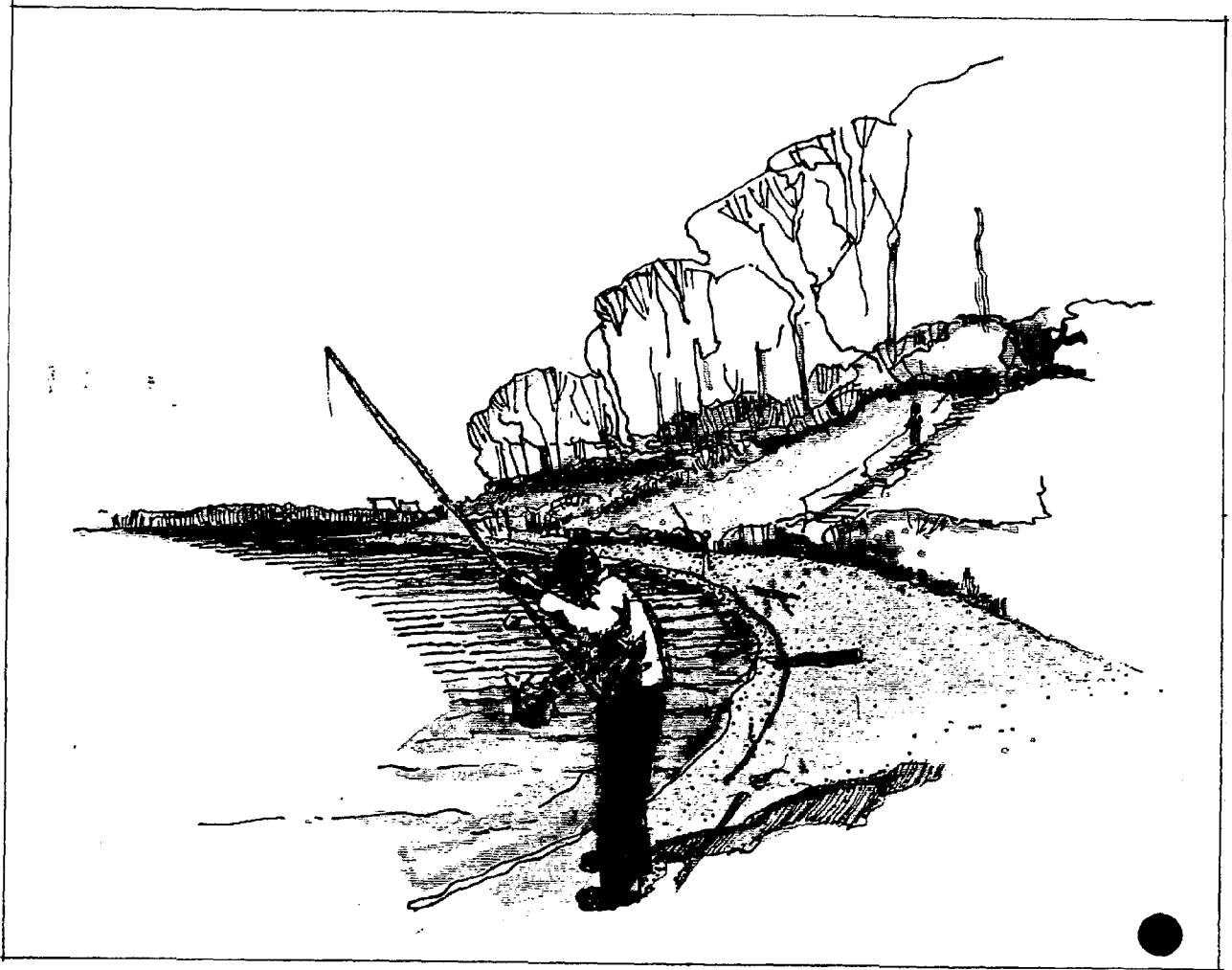
Surry would seem ideally suited to develop such a ecotourist industry; however, according to the Ecotourism Society, the key to sustaining such an industry is in "the government's ability to conserve the natural environment in order to derive cultural, economic and environmental benefits from the natural resources of a geographic location." Ecotourism should be a very attractive alternative to pursuing economic prosperity through traditional development.

SECURITY AND MAINTENANCE

One concern about providing the water-related recreational facilities presented in this study is how to adequately maintain and police them. Places which become the center for litter, vandalism, etc. are a net liability to recreation in the county and must be avoided. Criteria have been presented along with the schematic development plans to help facilitate maintenance and security. However, this will not be sufficient in itself; and a plan for maintenance and security must be part of the specific facility-planning process. This will obviously mean an added commitment of personnel. One way to assist with this and save the county money is to establish "neighborhood crime watch" and "adopt a highway" type programs. Individuals, business, and civic groups could be selected to "adopt a park" for litter pick-up and provide periodic surveillance of facilities.

Facilities should not be provided which cannot be secure and adequately maintained.





AREA OPPORTUNITIES

It is important to emphasize that the area opportunity recommendations of this study are strategic in nature in that identified in them are places where opportunities are likely to be and a means of measuring the suitability of specific sites for specific recreational facilities when they become available. This contrasts with the traditional approach of recommending specific sites and how they should be developed.

The strategic approach has been taken for several reasons. First, the county currently owns no waterfront land on which to provide any kind of access or develop any kind of water related facilities. Since the powers of eminent domain are not exercised by local governments in Virginia to acquire land for recreational

purposes, the county has no immediate potential for specific sites to develop. This strategic approach also allows for maximum flexibility to evaluate needs and readjust overall plans as sites become available, are developed and needs are fulfilled.

The recommendations for the various areas to be considered are by no means all-inclusive. They contain the most obvious areas to consider based upon the analysis in this study. Any opportunity which becomes present should be explored and evaluated by the criteria provided herein.

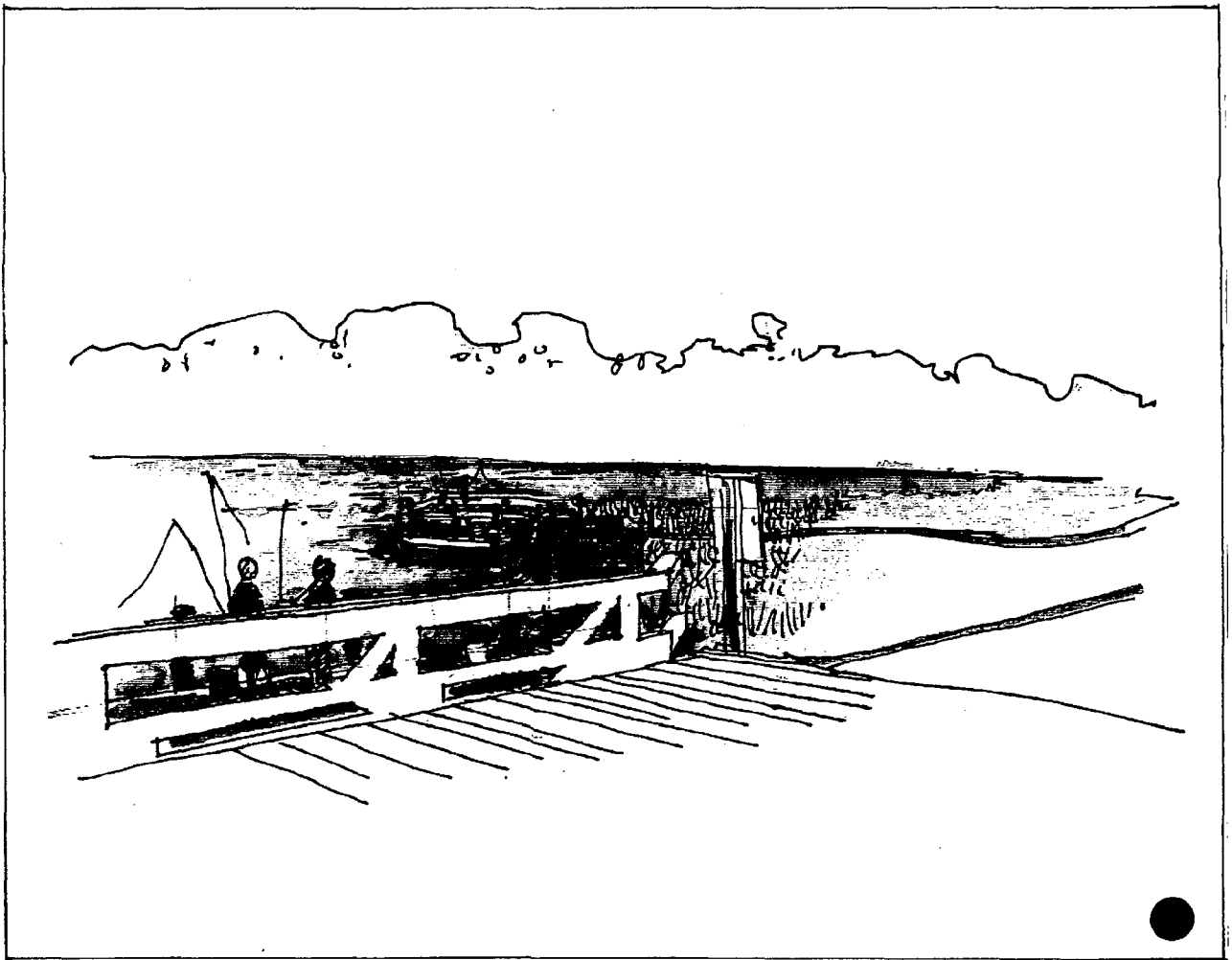
During the development of these recommendations, three categories or user groups become apparent, based upon user's origins and the distance they would be willing to travel to take advantage of the opportunities, these groups are as follows:

County Residents. Activities or facilities which are primarily focused on use by county residents.

County and Surrounding Area Residents. This group includes activities and facilities which would not only serve county residents, but would attract people in surrounding counties. These users would be primarily from those areas which do not have extensive water bodies and natural areas and, therefore, water/nature-related recreational opportunities.

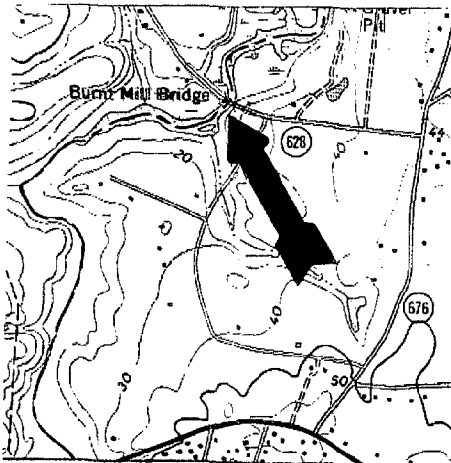
Tourists. Activities and facilities which would not only attract county and surrounding area residents, but would, no doubt, attract tourists who are already drawn to the Williamsburg/Jamestown/Yorktown area.

It should be noted that each successive group also includes the former group. It is assumed that some type of user fee would be required of non-county residents.



Lawnes Creek/628 Crossing

This is a typical road/stream crossing where the potential for water-related recreation exists. Located at the eastern edge of Surry County on the line with the Isle of Wight County, it would appear to be suited to the construction of a small pier and perhaps an attachment to the state highway bridge. There is adequate water on both the north and south sides of the bridge. However, there is not pull-off or parking opportunity close to the water, and local conditions of wetlands, topography, etc. would cause parking to be some distance away where there is flatter land about 100 yards west of the crossing. Another drawback of this site is a very high volume of traffic going in and out of the Virginia Power plant at the opening and closing times.



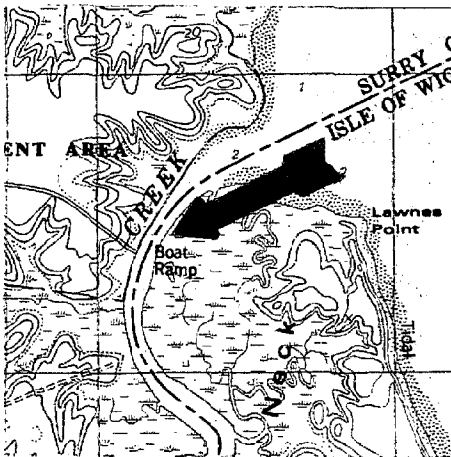
Potential Recreational Activities:

- Small boat hand launching
- Bank/small pier fishing
- Nature study/sightseeing
- Picnicking/roadside rest

Recommendations:

- Keep this area in mind as an alternative site should land, etc. become available.
- Explore availability of adjacent area for parking.

Lawnes Creek Boat Ramp



Lawnes Creek Boat Ramp should continue to provide boat launching access to Lawnes Creek and the James River. The county should encourage the State Department of Game and Inland Fisheries to improve the conditions at the facility and its access road. They should also be encouraged to provide some sort of surveillance of the area to reduce vandalism, littering and other undesirable activity. The county might also be able to assist in the policing/clean-up efforts by organizing volunteer groups. Of course, none of this can happen unless the road into the facility is upgraded to a condition which can be used by most automobiles in most weather conditions.

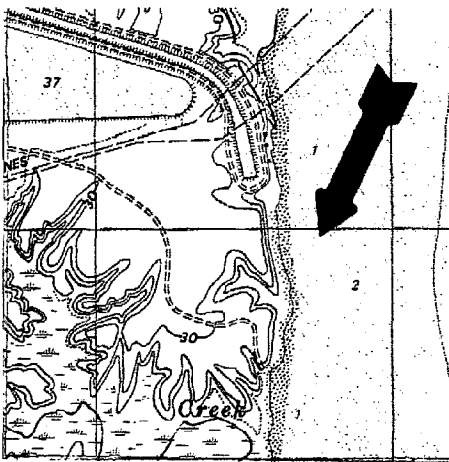
Potential Recreational Activities:

- Small Boat Hand Launching
- Bank Small Pier Fishing
- Nature Study
- Sightseeing
- Picnicking

Recommendations:

- Encourage VDGIF to improve, police and maintain the facility.
- Encourage VDGIF to improve the access road.
- Organize neighborhood surveillance/ litter campaign.

Virginia Power Property



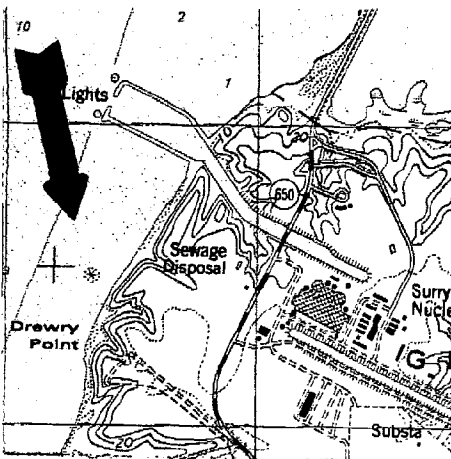
As part of its public relations campaign and display at the Surry Nuclear Center, Virginia Power is quite boastful about its role in providing public recreation opportunities as a byproduct of its presence in a community. This is certainly not true of the Surry property since it totally restricts public access. Without considering whether or not proximity to a Nuclear Plant is hazardous to the public, it would seem that Virginia Power's shoreline could be well-suited for public recreation.

Potential Recreational Activities:

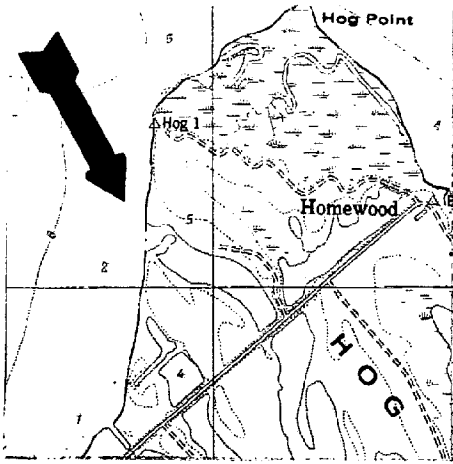
- Small boat/hand launching
- Medium size boat launch with ramp
- Bank fishing/small pier fishing
- Medium pier fishing
- Nature study/sightseeing
- Hiking
- Observation area

Recommendations:

- Approach VA Power about use agreements and providing public recreation opportunities.



Hog Island State Wildlife Management Area



Within the range of compatibility with the wildlife management objectives at Hog Island SWMA, there is the potential for improving access to the water for County residents and visitors alike. This could be achieved through the creation of a better trail and signage system leading people to areas where bank fishing and beach activities could easily be reached on foot. Parking relatively close to the areas with designated pathways and shoreline protection structures for the launching of small boats could also be easily added to the facility without disruption.

There is a possibility that a boat ramp could be accommodated on the western edge of Hog Island. However, the remoteness of this area and possible water depth problems would not make this a prime location.

A major improvement that could help facilitate recreation at Hog Island could be achieved through greater county awareness of available recreational opportunities.

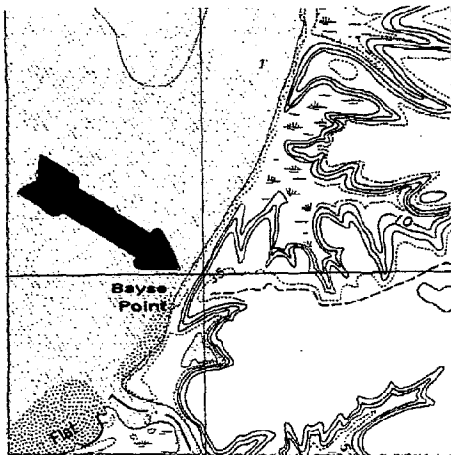
Potential Recreational Activities:

- Small boat hand launching
- Medium boat launch with ramp
- Bank/small pier fishing
- Nature study/sightseeing
- Hiking
- Beach bathing (limited to sunbathing on beaches)
- Historical interpretation
- Picnicking
- Hunting (controlled)
- Wilderness camping

Recommendations:

- The county make its residents much more aware of the opportunities already available at Hog Island.
- The county work with the game commission to make the waterfront somewhat more accessible.

Bayse Point (between Virginia Power and Chippokes)



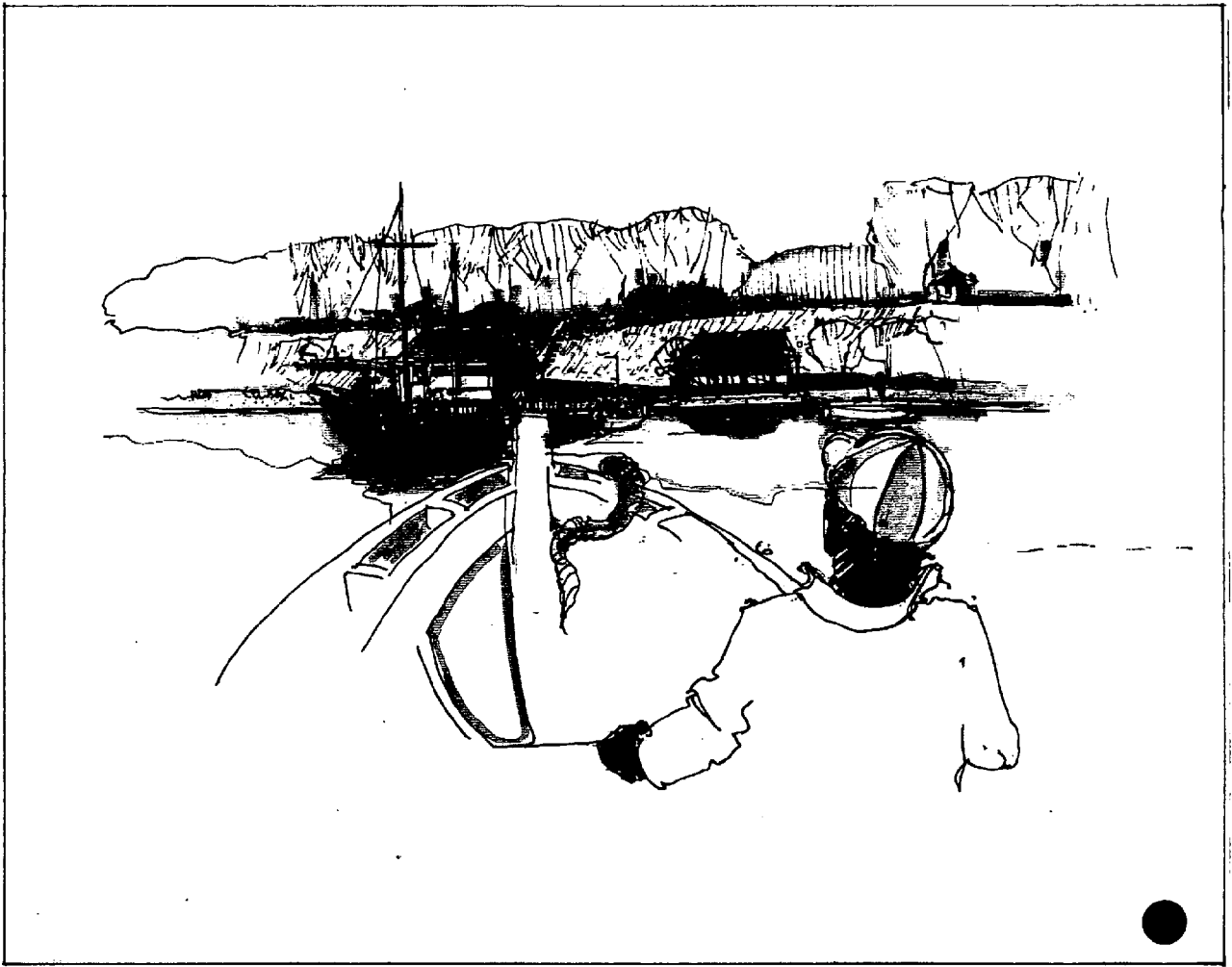
Within this area are two large tracts of undeveloped land with frontage on Cobham Bay, less than a quarter mile from Route 650. Depending upon exactly which area may be available, these sites would, perhaps, have the potential as a bathing beach, recreation area, or a combination of facilities to form a major county riverfront park.

Potential Recreational Activities:

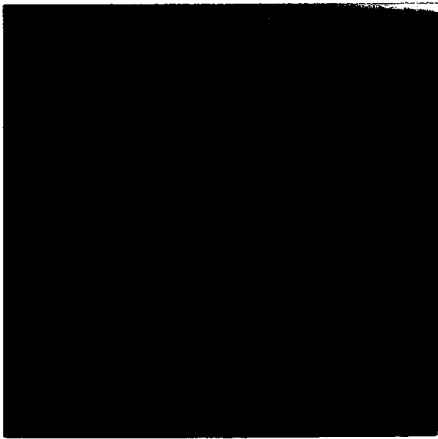
- Small boat/hand launching
- Bank/small pier fishing
- Medium pier fishing
- Nature study/sightseeing
- Hiking
- Camping
- Observation Area
- Beach bathing (shallow water)
- Picnicking
- Sailing
- Wind Surfing
- RV camping

Recommendations:

- The county monitor the availability of this property and conduct more detailed evaluation should it become available.

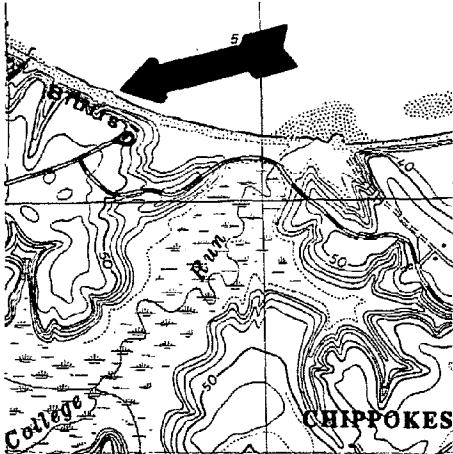


Chippokes Plantation State Park



As has been already stated, Chippokes is a major provider of waterfront recreation in terms of historic interpretation, nature study and bank fishing. The county should work closely with the park staff in the development of programs for county residents. They should also make county residents more aware of the facilities currently available at Chippokes. These programs might include bank fishing on the beach along Cobham Bay, College Run and Lower Chippokes Creek; environmental education and nature study throughout the Park; and perhaps, canoe and small boat access at selected locations.

Chippokes also has the potential for development of a major waterfront, historic interpretation area, and tourist attraction.



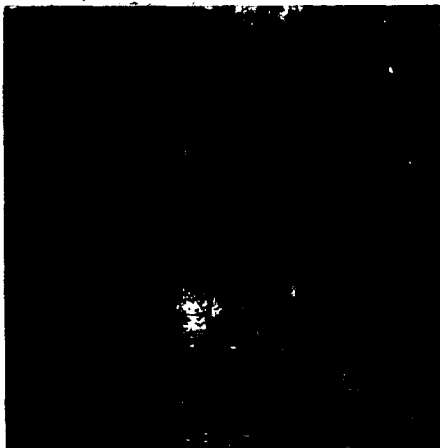
Potential Recreational Activities:

- Small boat/hand launching
- Bank/small pier fishing
- Nature study/sightseeing
- Picnicking
- Camping
- Observation Area
- Hiking
- Historical interpretation
- Tourist attraction

Recommendations:

- The county work closely with Chippokes State Park to develop programs for county residents.
- Where compatible, provide better access for small boats and bank fishing.
- Encourage the state, and perhaps, work in partnership with them in the development of a major waterfront/ historic interpretive area, interpreting early riverfront transportation and boat-building activity.

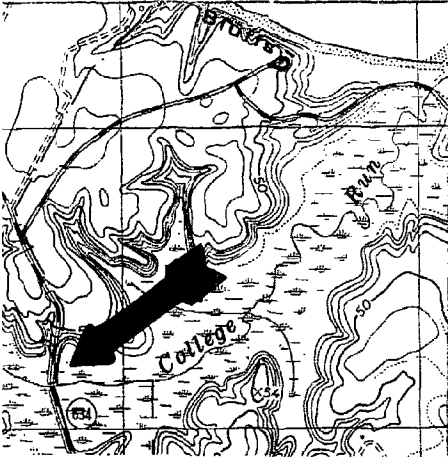
College Run/634 Crossing



This area is a very picturesque small stream crossing near the entrance to Chippokes Plantation State Park. Its major attribute is its scenic quality which, if used as a recreational site, should be preserved. The stream is not large enough to be the focus of any serious fishing, although the opportunity to fish could arise while picnicking or just enjoying the scenery.

Potential Recreational Activities:

- Bank fishing
- Sightseeing
- Picnicking

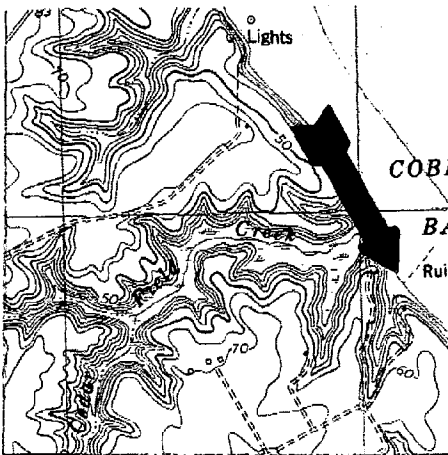


Recommendations:

- The county investigate the availability of land in this area for a small wayside with one to two picnic tables and roadside parking limited to one or two cars.

Mount Ivy Beach

This 5.9-acre parcel of land is owned jointly by the property owners of Mount Ivy Beach Subdivision. It has road access to a small beach where the remains of an old wharf extends several hundred feet into Cobham Bay. Any recreational potential for the general public at this site would be dependent upon establishing an agreement between the county and the homeowners' association.



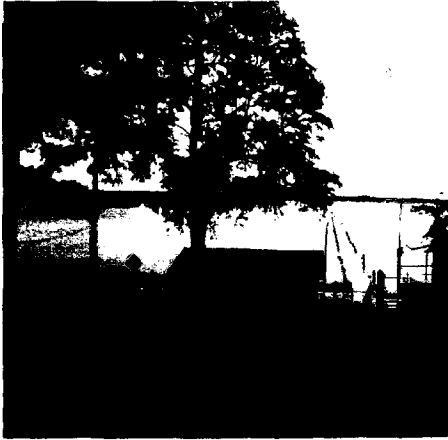
Potential Recreational Activities:

- Small boat/hand launching
- Bank fishing
- Beach bathing
- Picnicking
- Sailing
- Wind Surfing
- Major fishing pier (on wharf ruins)
- Sightseeing
- Historic interpretation

Recommendations:

- The county explore a use agreement with the homeowners' association.

Cobham Wharf



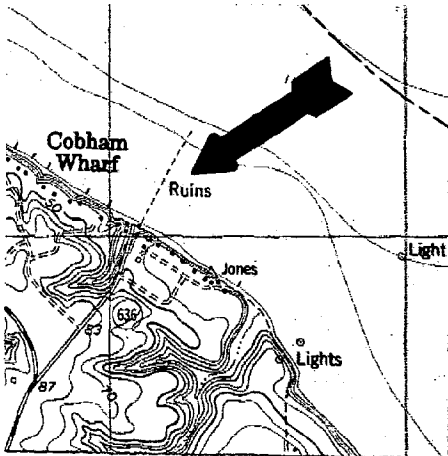
Cobham Wharf is a beachfront cottage community with the ruins of an old wharf extending several hundred feet out into the river. There is no direct access to the beach because cottages are located directly at the end of the right-of-way and owned privately. It's not thought that access to the beach and ruins is likely because of the nature of development in the area. However, this is a good area for interpretive signs at the end of the road and, possibly, a small parking lot at the top of the hill.

Potential Recreational Activities:

- Sightseeing
- Historical interpretation

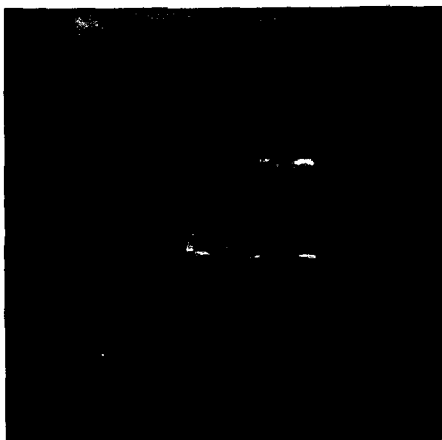
Recommendations:

- The county provide interpretive signage for the wharf ruins and explore the possibility of providing a small parking area and pedestrian access to the ruins.



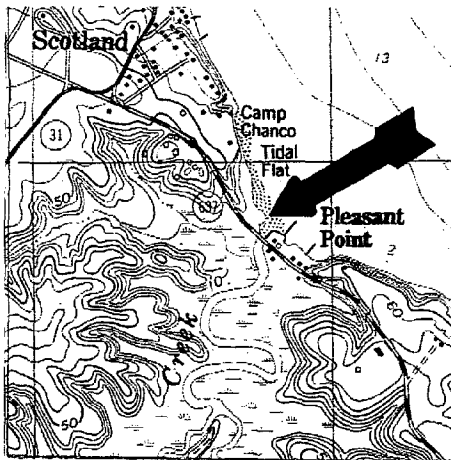


Crouch Creek



Crouch Creek has the potential for becoming a very colorful and active small waterfront marina/fish market/tourist attraction. The area's scale and unique character could be made quite attractive with a relatively small expenditure. Located close to Scotland, it is within easy walking distance for pedestrians who come over on the ferry and would, no doubt, be a favorite stopping point along the tourist loop. Here local products, crafts, etc. could be sold.

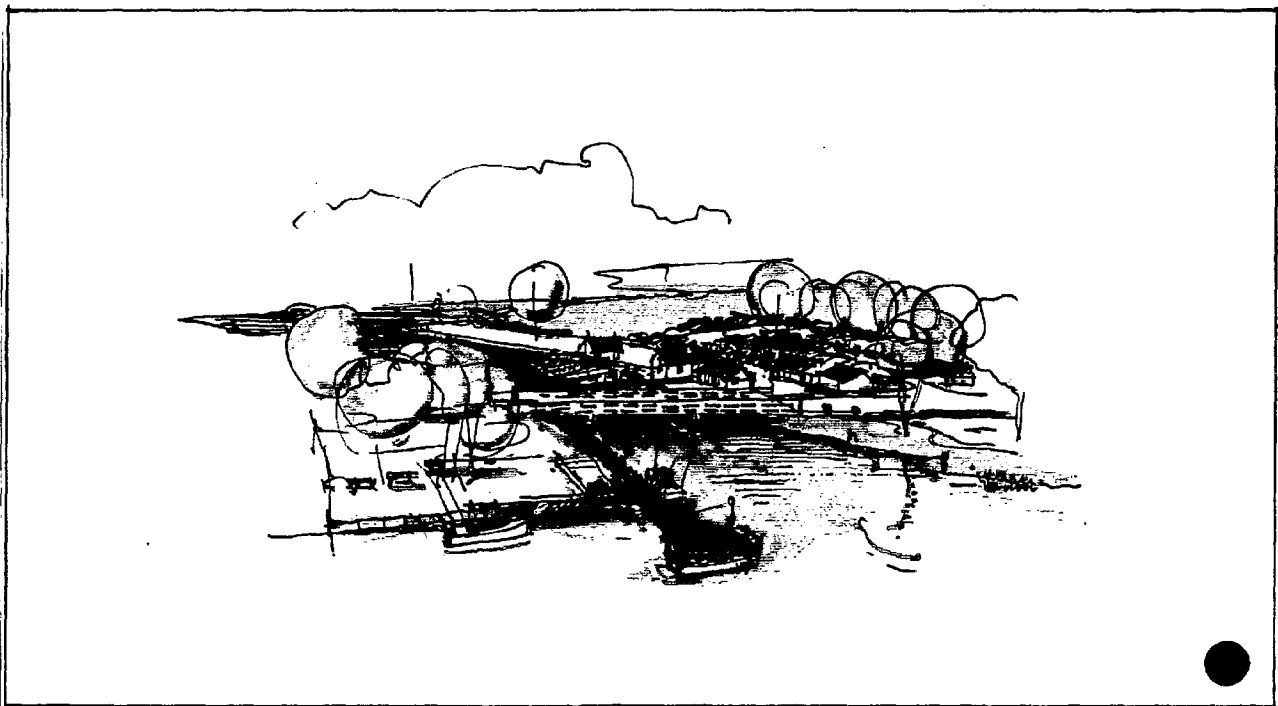
This is one of the few waterfront areas in the county where there is existing parking. The fish market which has been there for years could be revived to serve county residents and periodic visitors. Canoes and small boats could be rented for fishing and boating on Crouch Creek, while the boat ramp would be available for small power boat access to the river.



The opportunity for small pier fishing and crabbing would be available at the marina, while just across the road, at the mouth of the Creek, people could fish from the bank. If land were available, this might be a good location for a medium or even major fishing pier.

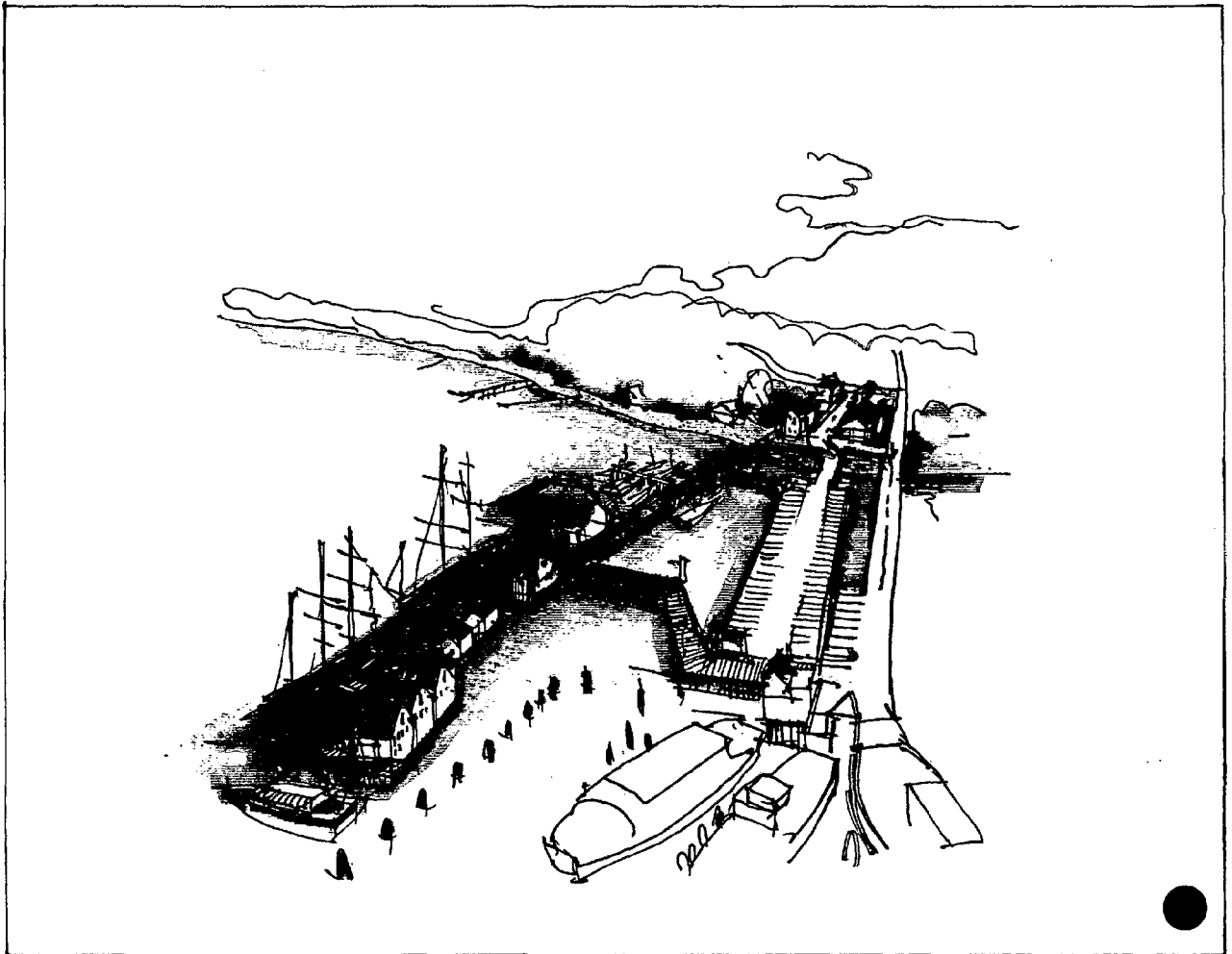
Potential Recreational Activities:

- Small/medium boat launch
- Medium boat launch
- Bank/small pier fishing
- Sightseeing
- Medium/major fishing
- Waterfront attraction on tourist loop

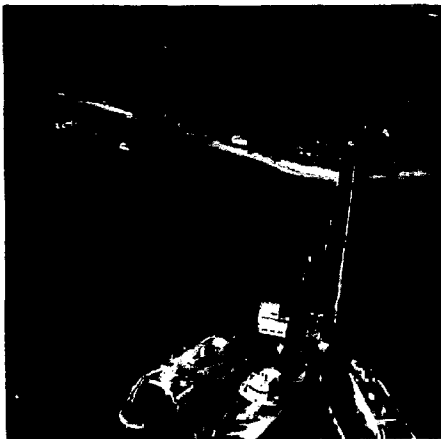


Recommendations:

- The county encourage restoration/ redevelopment of this area to a viable waterfront small boat marina, market, and tourist attraction.
- The county explore the idea of public/private partnership or tax incentives to help this activity.
- The county explore availability of land and/or land use agreement on the river side of the road for bank fishing and pier construction.



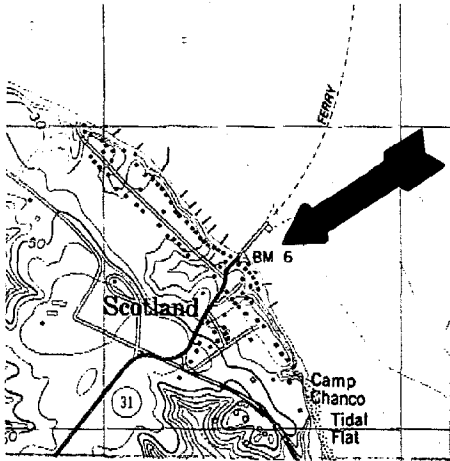
Scotland Wharf/Tourist Loop



Scotland Wharf is an opportunity waiting to happen, one which is long overdue. It has the potential to develop into a major waterfront attraction like, but on a smaller scale, Battoman Harbor, Lowell Massachusetts, or closer in scale, St. Michaels, Maryland.

The development of Scotland Wharf could create a strong sense of place and destination attracting tourists over to the "Surry side."

One development concept for the area would be to build upon the late 1800's theme of the wharf town where the narrow gauge railroad delivered timber to be loaded onto schooners at the dock. Possible facilities in the complex would include a museum, floating



restaurant, gift shops, and perhaps, even some lodging accommodations on the shore. River cruises could originate at the Wharf and tour the Surry side, as well as the Colonial National Park area, Jamestown, etc.

This is obviously an ambitious idea and there are numerous obstacles to overcome, such as parking placement, method of idea initiation, etc., but it is a viable concept which could convert Scotland Wharf into a regional attraction.

Scotland Wharf would not only be a major waterfront attraction in itself, but would be the beginning and ending point for a tourist loop which would start at the Wharf, continue to the town of Surry, on to Bacon's Castle, to Chippokes, to Crouch Creek and back to Scotland. An extended loop would take in Hog Island and the Virginia Power Visitors Center. There could also be a multi-purpose trail along this route to accommodate cyclists.

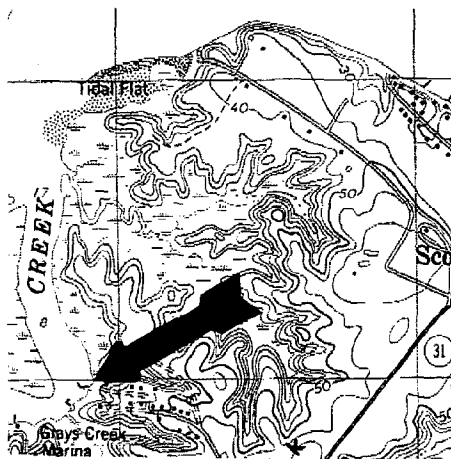
Obviously, this is not a project the county would undertake on its own, but would perhaps be a partner in a team of multiple business, civic and other interests. Potential investors might include Virginia Power, which has a vested interest in the community already; local businesses such as, those producing ham and peanut products, and even neighboring communities such as, Smithfield, whose own waterfront plans would be enhanced through a link with Scotland Wharf and the Scotland/Jamestown Ferry. Such a development would be a boon to the local economy and create the most desirable spin-offs in the form of jobs, enhancements, etc.

Potential Recreational Activities:

- Museums
- Restaurants
- Boat docks/ Services
- Shops
- Lodging
- River cruise
- Head boat departure/ arrival

Recommendations:

- Conduct project and market feasibility study for investment and revenue projections.
- Seek interested project participants, i.e., Virginia Power.
- Prepare a preliminary planning/feasibility/marketing study.
- Prepare a developer inquiry/ RFP.
- Monitor availability of key waterfront properties and acquire these properties as they become available.



Grey's Creek Heights

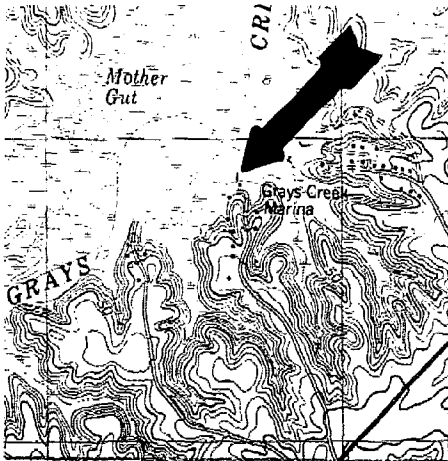
Because of its central location, ease of access, positioning near the mouth of Grey's Creek and the boat launch and docking facilities already present, this area is one of the best locations for a small marina in the County. The major obstacle here is the property is privately owned by the Grey's Creek Heights community homeowners' association. It is doubtful this area could be purchased, but perhaps an agreement could be reached for its use by the general public through tax incentives, agreements for improvements by the county, etc.

Potential Recreational Activities:

- Hand launching
- Medium boat launching
- Medium pier fishing
- Small marina
- Sightseeing
- Picnicking

Recommendations:

- The county pursue purchase of a use agreement with the Grey's Creek Homeowners Association

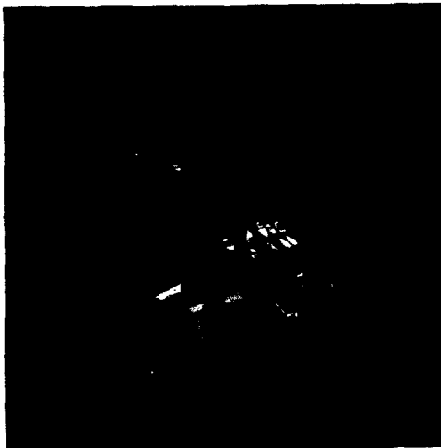


Grey's Creek Marina

As an existing public business marina, this facility offers perhaps, the best opportunity for marina development in the county despite its limitations of access, topography, etc. It is possible, through a public/private partnership or tax and/or other incentives for the county, to generate improvements to this facility which are very badly needed.

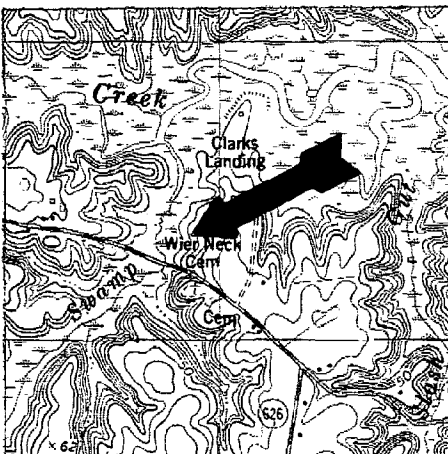
Potential Recreational Activities:

- Small boat launching
- Medium boat launching
- Small pier fishing
- Marina
- Possible head boat dock departure/arrival area



Recommendations:

- The county pursue marina improvements through private business channels, public/private partnership and other incentives.



626 Crossing of Dark Swamp

This is a small stream crossing at the head-waters of Grey's Creek. It is a very picturesque swamp environment which already has a wide shoulder pull-off area able to accommodate about three cars. The scenic value of the area is very high; and recreational uses should respect and preserve this quality. It would seem to be an ideal area to put in a canoe, particularly for nature study, and just experiencing the swamp environment by boat. A small platform for fishing and hand-launching could be installed adjacent to the bridge, or attached to it.

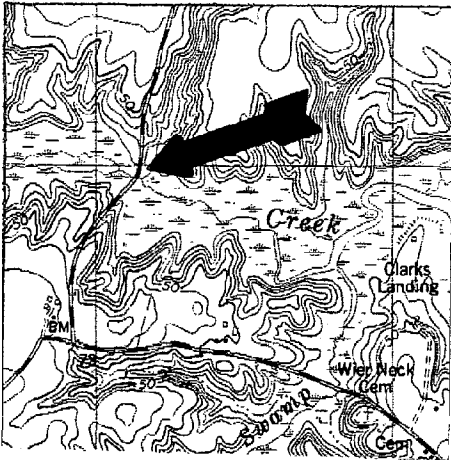
Potential Recreational Activities:

- Small boat hand launching
- Bank fishing
- Small pier
- Sightseeing
- Nature Study
- Picnicking

Recommendations:

- Explore the acquisition of land or a use agreement for the area.

Grey's Creek/618 Crossing



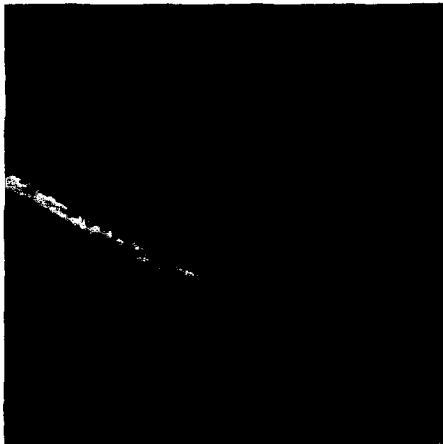
This is an area similar to the preceding one, but somewhat larger in size and opportunities. Although, not quite as picturesque or swamp-like in character, it would possibly better accommodate fishing activities. Once again, a small dock-pier hand-launching facility could be installed at or near the bridge.

Potential Recreational Activities:

- Small boat hand launching
- Bank and small pier fishing
- Sightseeing
- Nature Study
- Picnicking

Recommendations:

- Explore the acquisition of land or a use agreement for the area.



Swanns Point

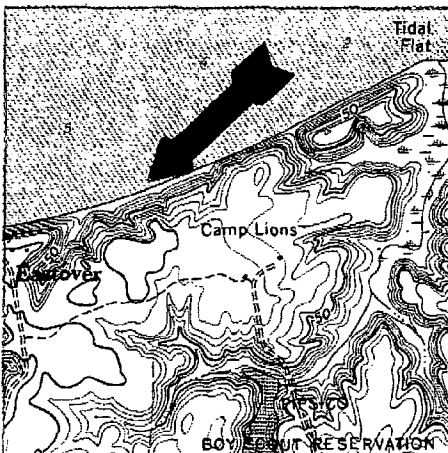
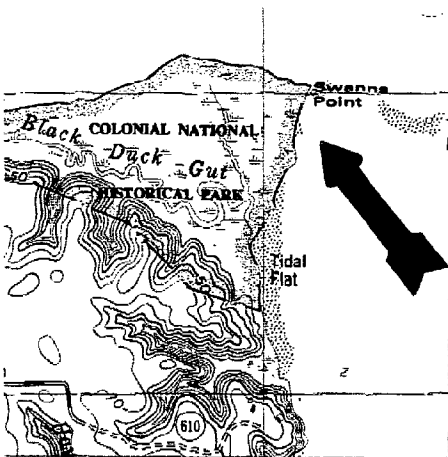
Although the national park land is only accessible by boat, it does have recreational potential. Because it is owned by the National Park Service, any use of the property would have to be with their concurrence. The property above the park is a large, privately owned farm and there are no specific recommendations for its use. However, it is worth noting that some of the more spectacular views, along the entire length of the tidal James, are from this site. Should this property ever become available, it should be considered for inclusion in State or National Park Service system.

Potential Recreational Activities:

- Bank fishing
- Nature Study
- Sightseeing
- Hiking
- Historic Interpretation
- Picnicking
- Beach Bathing

Recommendations:

- Contact National Parks Service concerning use of parks and possibly of County/ Park service programs.



Eastover, Pipsico, Camp Chanco

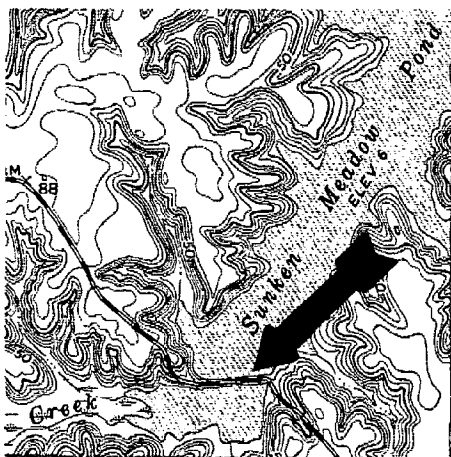
As these properties are owned by civic organizations, the likelihood that something can be worked out for limited public access to waterfront recreation would seem much more likely than on privately owned land. These properties are already being used for recreational purposes and have facilities available. An argument could be made, since they are tax-exempt, but benefit from county services, it would be appropriate for them to assist the county in fulfilling some of its recreational needs.

Potential Activities:

- Bank fishing
- Small boat hand launching
- Sailing
- Wind surfing
- Nature study
- Sightseeing
- Historical interpretation (Eastover)
- Hiking
- Camping

Recommendations:

The county negotiate a use agreement with these property owners. If property becomes available, include a public awareness program and develop parks and recreation programs for organized use.



Sunken Meadow Pond/ 626 Crossing

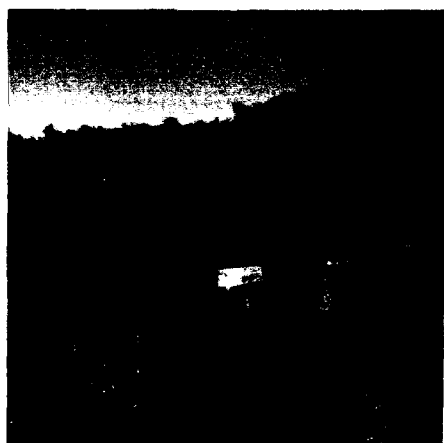
This is a very scenic, open-pond environment which is privately owned and posted against trespassing, fishing, hunting, etc. It would appear to be a good spot for fishing and construction of a small platform attached to the highway bridge. The only opportunity for a parking area would be several hundred yards away which somewhat limits the potential of this area.

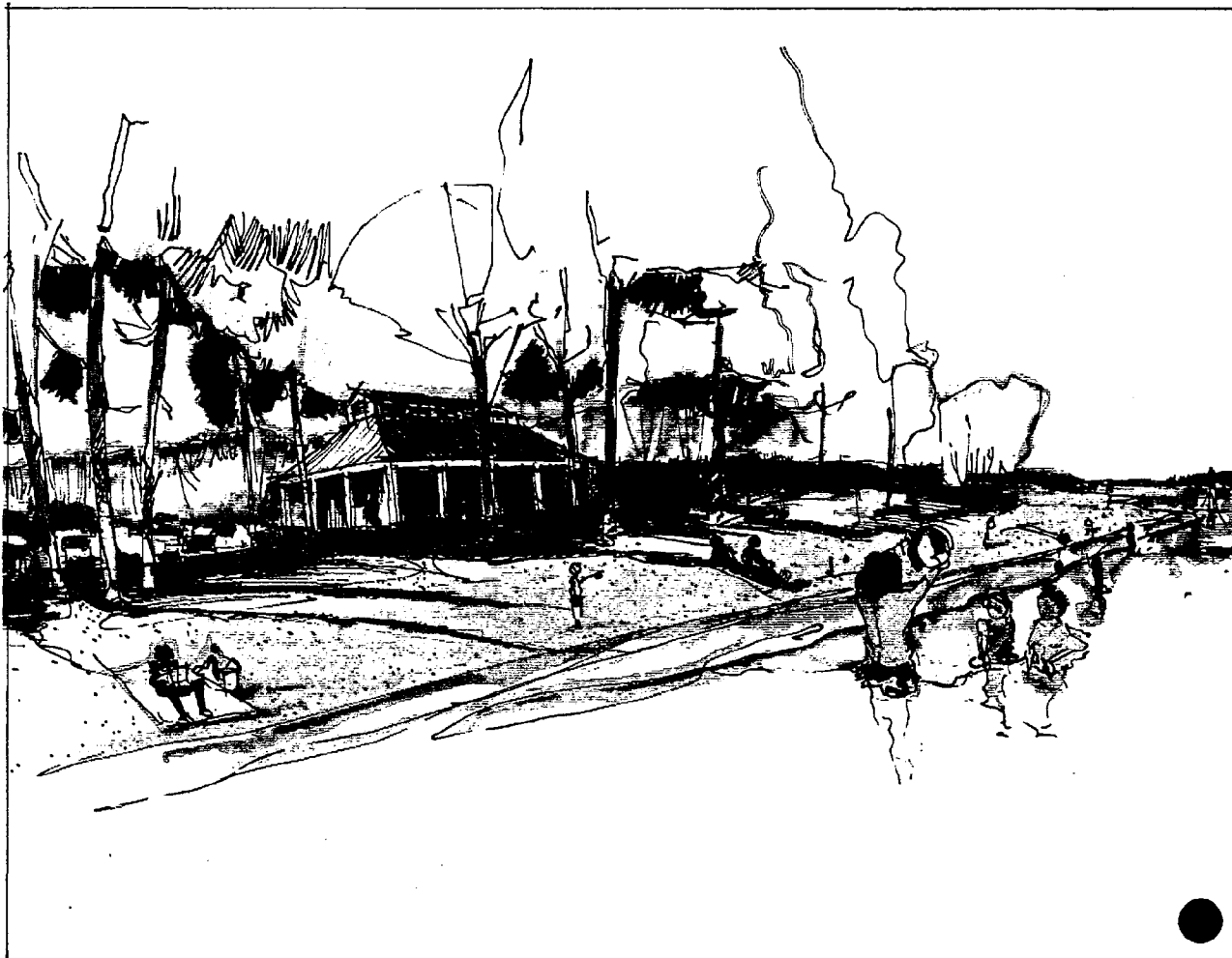
Potential Activities:

- Small boat hand launch
- Bank/ small pier fishing
- Sightseeing

Recommendations:

- county pursue use agreement with property owners.



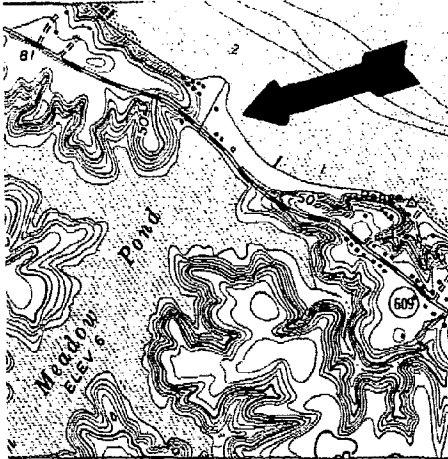


Sunny Meadow Beach/ Sunken Meadow Pond North End

These are two separate properties with different owners, adjacent to each other, divided by Route 626. Together they offer the best natural potential for a county-wide waterfront recreation park. The area is centrally located on the riverfront and is directly accessible by Route 626. Except for historic interpretation and nature, it has the opportunity for virtually every other water-related recreational activity considered in this study.

On the riverside of 626, at Sunny Meadow Beach, the presence of an existing bathing beach, the natural lay of the land, and the size of the site make it ideally suited for sunbathing, pick-up games, picnicking, and

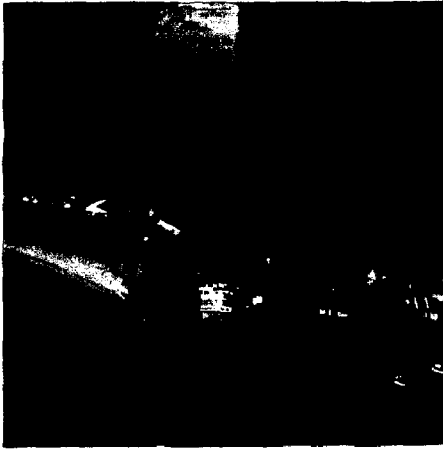
a large parking area without extensive grading or disruption of the land. A medium or large pier could be built out into the river which would separate boating activities from swimming. A structure already exists which could be converted to a bath house facility without building a new building in the flood plain.



This site may even have the potential of developing a small marina by excavating an area on the edge of the Sunken Meadow Pond outflow canal and constructing a breakwater where the canal enters the river.

The obvious restrictions are that it is a privately owned, densely developed, vacation mobile-home park. However, most, if not all, of the property is located in the flood plain making these mobile homes subject to flooding, which is a potential threat to public health, safety and welfare and might justifiably be phased out of existence.





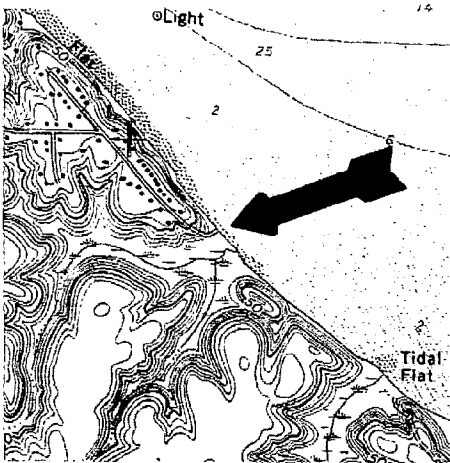
Just across Route 626 is North Sunken Meadow Pond. This is the site of a small john-boat concession which no longer appears to be in business. The area is ideal for resumption of this kind of activity as a major fresh water fishing lake. A medium size pier can easily be installed, and the area near the existing buildings could easily be converted into parking. This site, combined with Sunny Meadow Beach, could go a long way in fulfilling the "active" water-related recreational needs of the county.

Potential Activities:

- Bank/Medium/Major Pier Fishing
- Small Boat hand launching/ Medium ramp
- Marina
- Sightseeing
- Camping
- Nature study

Recommendations:

- Assess feasibility of phasing out current nonconforming uses, purchase and conversion to county-wide waterfront recreation park.



Guilford Heights

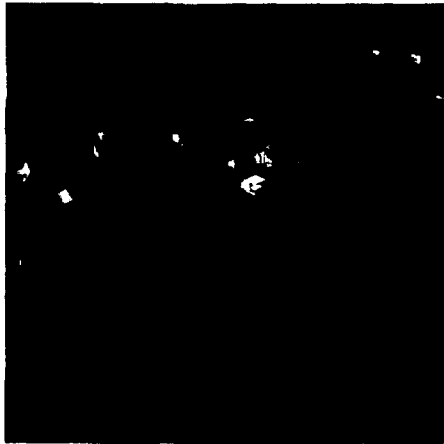
This is an older waterfront vacation cottage community located just east of Claremont. It has a commonly owned recreational area with a boat ramp, parking lot, picnic and beach area which is less than one-quarter mile off of the state road. However, this area is only accessible directly through the community which visibly displays signs of "Keep Out," "Private," "Resident Only." This creates doubt about the owner's willingness to agree to any general public use, but perhaps, there is the possibility on a controlled basis.

Potential Activities:

- Small boat hand launching
- Bank fishing
- Hiking
- Beach bathing
- Picnicking
- Water skiing
- Sailing
- Wind surfing

Recommendations:

- Negotiate with homeowners' association for public use. If agreement can be reached to develop use programs.



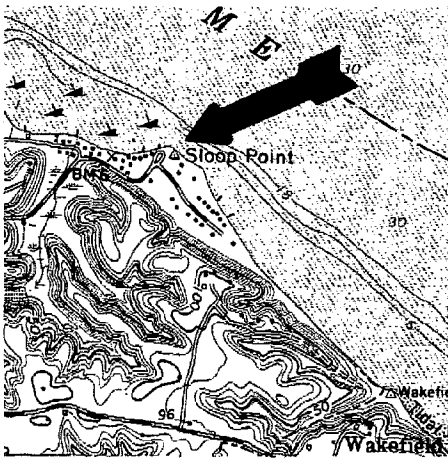
Sloop Point

This is riverfront property owned by the Hartz and Rogers subdivision homeowners' association, located at the end of Route 1220 in Claremont. The area has a sandy beach, about 50 feet deep, with the remains of an old wharf at the waters edge.

The town of Claremont owns a .257 acre parcel of land behind the beach in this area which is thought to be the parking area at the end of Route 1220.

The old wharf remains would appear to be suited to reconstruction as a fishing pier. Nautical charts indicate that the water depth drops off more rapidly in this area than in anywhere else in the county. Therefore it might be a good riverfront location for a boat ramp. As the river is at its narrowest point, protection from currents might be necessary.

The USGS maps and nautical charts indicate wrecked vessels between this area and Claremont Beach. The presence of these wrecks might offer an interesting area for scuba diving or subaqueous archeology.



Potential Activities:

- Small boat hand launching
- Medium boat launch with ramp
- Bank fishing/ long pier fishing
- Medium pier fishing
- Sightseeing
- Beach bathing
- Historic interpretation
- Picnicking
- Water skiing (actual skiing down stream where river is wider)
- Sailing/ Wind surfing
- Scuba diving

Recommendations:

- County work with the town of Claremont in purchasing or working out a use agreement with the homeowners' association.
- If property can be purchased or an agreement reached, developing a riverfront park.

Claremont Beach

Claremont Beach is an older river / beach-front vacation community of permanently cited mobile homes and conventionally built houses. It has a boat ramp which can be used by the public for a fee, but the display of "private," "no trespassing" signs at the entrance into the community discourages public use by people not familiar with the facility.

A very interesting old wharf ruin with an overhead structure extends into the river about 150 feet. It creates a curious site, one which is an ideal subject for historic interpretation. Perhaps, it could even be reconstructed as a fishing pier if public access were obtained.

Second only to the Sunny Meadow Beach, this area has the best natural potential as a waterfront bathing beach park. The area from the boat ramp west for approximately 200 yards has a park-like setting with a large expanse of grass under trees and a sand beach about 30 feet deep.

Potential Activities:

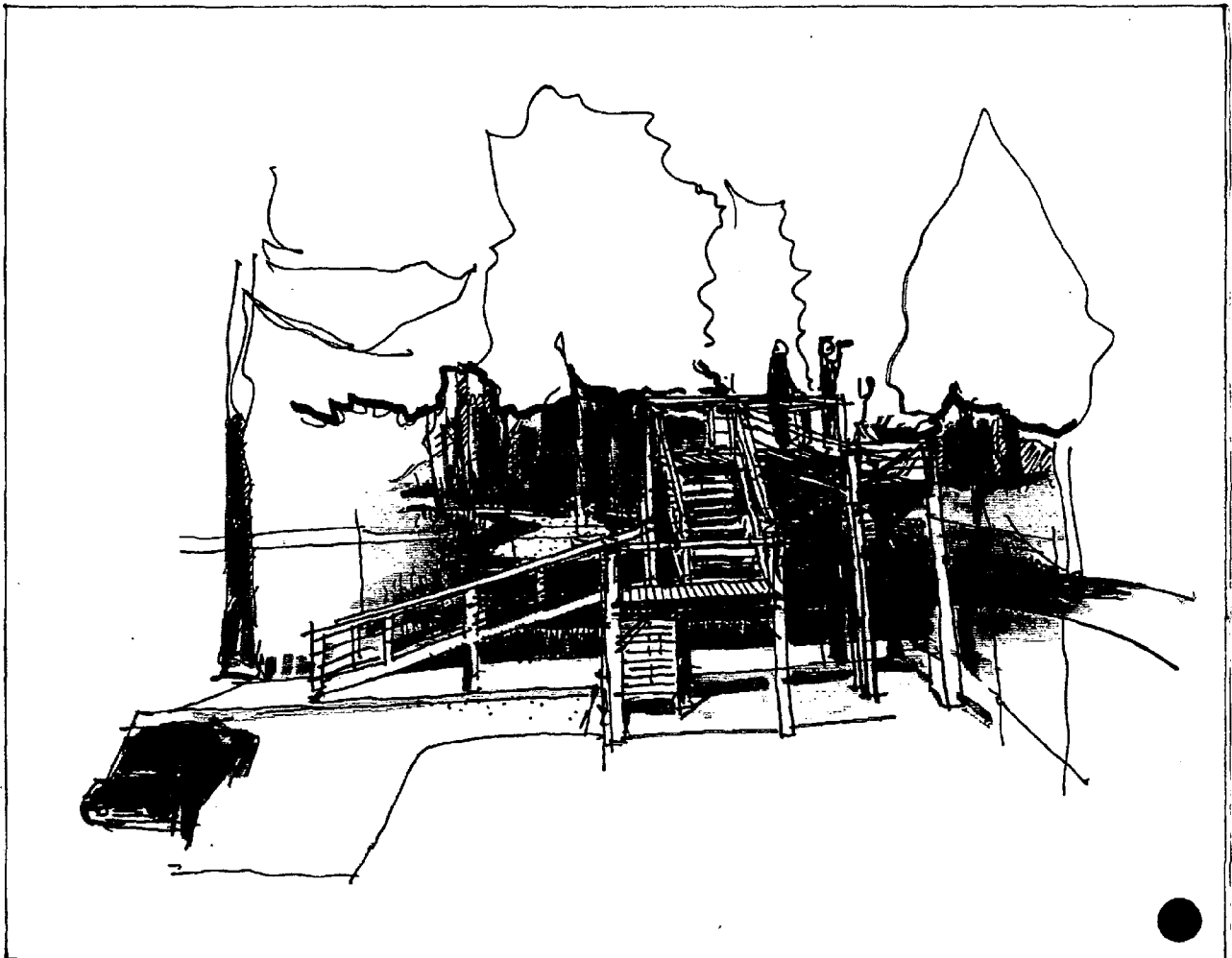
- Small boat hand launching
- Medium boat launch with ramp
- Bank fishing
- Small/ medium pier fishing
- Sightseeing
- Beach bathing
- Historical interpretation
- Picnicking



- Water skiing (actual skiing down stream where river is wider)
- Sailing/ wind surfing
- Scuba diving

Recommendations:

- Explore acquisition of beach property west of the boat ramp.
- Work with the community to provide access to the public.
- Clarify boat ramp signs so that they are clearly for public use.



Brandon Gut

The drive to the mouth of Brandon Gut is one of the most scenic, not only in the county, but in the region. It offers the rare opportunity to experience a swamp wilderness environment from an automobile, thus offering the unusual potential for access and interpretation of this kind of ecosystem to the handicapped, disabled, etc.



Unfortunately the access / right-of-way ownership is the subject of a dispute between the Town of Claremont and the adjacent land owner and the future of public access is in question. The area at the end of the right-of-way has exceptional views of Upper Chippokes Creek and Brandon Gut but has unfortunately been marred by the construction of a ten-foot chain link fence surrounding the parking/turnaround area.

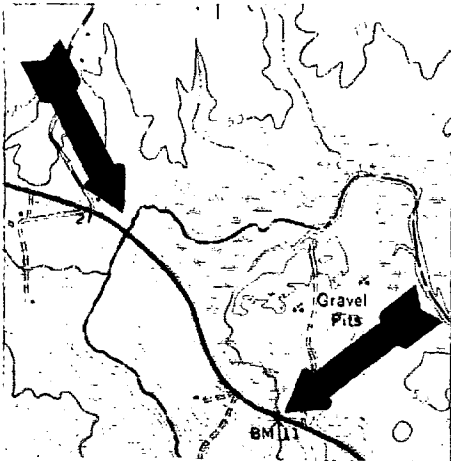
If ownership of the right-of-way is decided in favor of the town, interpretive signs should be installed at the edge of the roadway to explain the natural area. Assuming the fence at the parking/turnaround cannot be removed, an observation tower could be constructed to get above the fence and take advantage of the spectacular views. If the fence can be removed and access obtained to the water's edge, it would be a good place for a small or medium fishing pier, which, according to local residents, used to be at the site. Although the road and turn-around are not very wide, they should remain as they are so as not to disrupt the environmental and visual quality of the area.

Potential Activities:

- Small boat hand launching
- Bank fishing
- Small or medium pier fishing
- Sight seeing
- Picnicking
- Hiking
- Nature study

Recommendations:

- Assist the Town of Claremont in keeping road access open to the public.
- Construct interpretive, decorative signage along the roadway.
- Construct observation tower at turn around.
- Construct fishing pier if access can be obtained.
- Take special precautions to protect the environmental and visual quality of the area.



Upper Chippokes Creek/ Route 10 Crossing

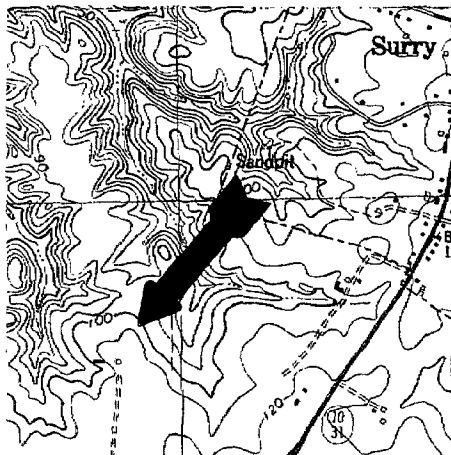
This area should continue to be available on a seasonal basis for dip-net herring fishing.

Potential Activities:

- Bank fishing

Recommendations:

Negotiate formal use agreement with land owners in the area to ensure future availability for seasonal dip-net fishing.



Surry County Recreation Center

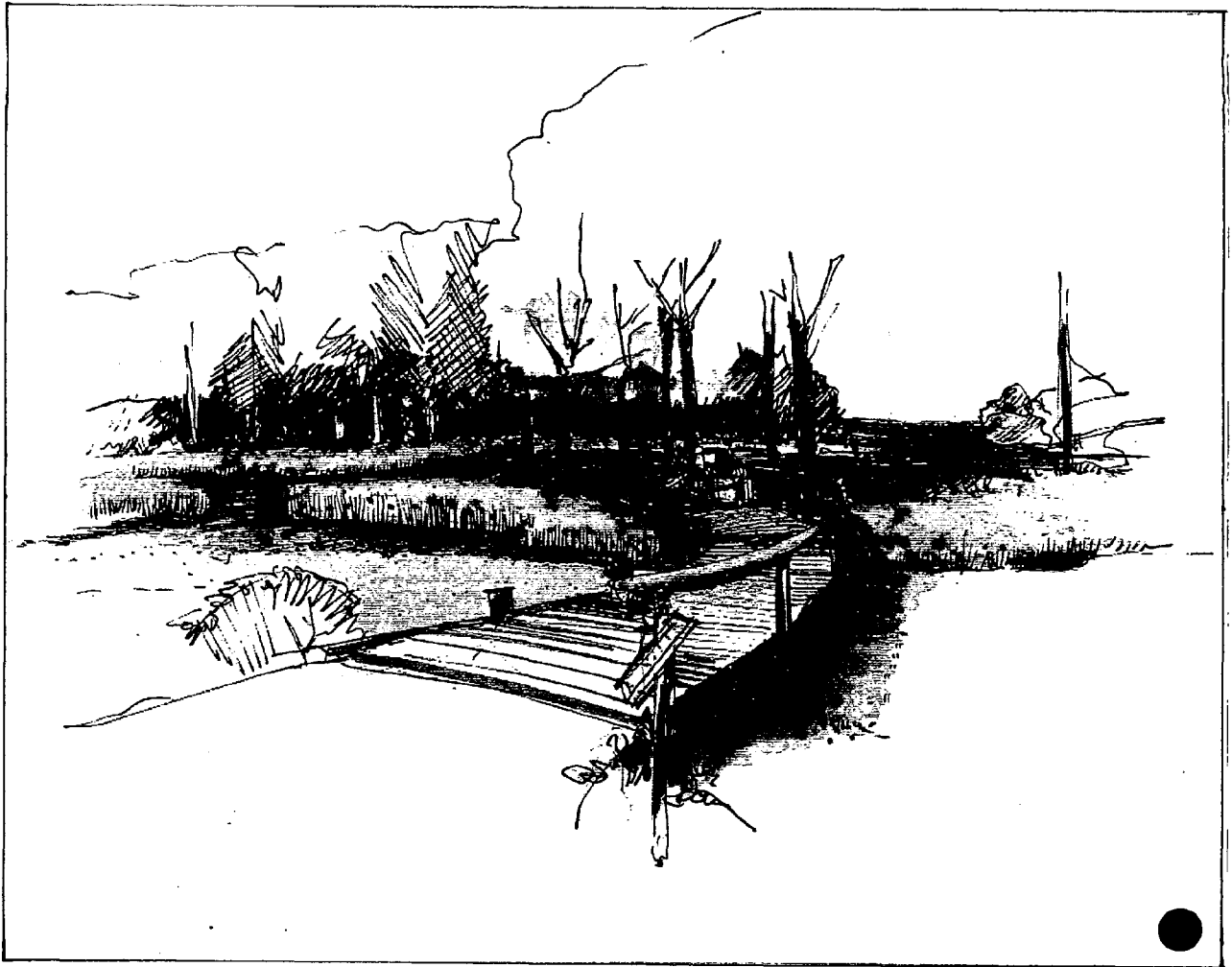
It has been suggested that the recreation center would be a good location for construction of a recreation lake. This would place water-related recreation activities of small boats, fishing, picnicking, etc. close to other activities provided at the center which would consolidate facilities.

Potential Activities:

- Small boat hand launching
- Bank/ Small pier fishing
- Nature study
- Hiking
- Camping

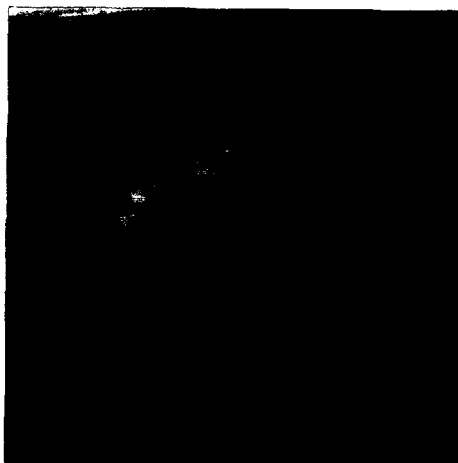
Recommendations:

- Explore topographic, soil, watershed feasibility of lake construction.
- Explore construction of funding assistance from the State Department of Game and Inland Fisheries.



POTENTIAL COUNTY NATURAL AREAS (PCNA)

Areas have been identified on the natural area resources map and are included on the recommendations map. They include: Upper Chippokes Creek, Brandon Gut, Sunken Meadow Pond, Swann's Point, Upper Grey's Creek, Crouch's Creek, College Run, Lower Chippokes Creek, and Lawnes Creek. Depending upon the characteristics which distinguish these individual areas, any or all of



them could and should be considered for inclusion in a natural areas system. The use of these areas might be as simple as obtaining easements to protect resources with very limited public access and no development of facilities. Other areas, might become the site of nature/ historic interpretation, a major nature study area with a nature center involving acquisition of at least part of the natural area for construction of necessary buildings, parking areas, etc.

Chesapeake Bay national Estuarine Research Reserve System (CBNERRS-VA)

The CBNERRS-VA was established in 1991 for the purpose of providing field laboratories for long-term ecological research and monitoring. The ecosystems in which these are set up are to represent natural ecological conditions with minimal disturbance as a result of human activity. The CBNERRS-VA is managed by VIMS and is a part of the National Estuarine Research Reserve System (NERRS).

A likely scenario for most of these areas would be an easement program to protect the resources combined with use agreements for the installation of minimal facilities including trails, marsh bridges, observation towers, and minimal parking areas.

Potential Activities: (Depends upon the exact nature of the area and resource)

- Small boat hand launching
- Bank/ small pier fishing
- Nature Study
- Hiking
- Wilderness camping
- Sightseeing
- Historic interpretation
- Hunting (restricted, compatible with resource management)

Recommendations:

- Study PCNA's to refine area definitions.
- Establish an easement program for protection of PCNA resources.
- Monitor availability of property for acquisition.
- Approach land owners of PCNA's for easement/ donation/ use agreements.
- Explore outside programs such as VIM's for development in county PCNA's.
- Make public aware of existing and future opportunities as they become available.

**Key to Potential Recreational Opportunities
Listed on the following Map:**

1. Small boat hand launching
2. Medium size boat launch with ramp
3. Marina
4. Bank/ small pier fishing
5. Medium pier fishing
6. Major pier fishing
7. Nature study
8. Hiking
9. Wilderness camping
10. Sightseeing
11. Beach bathing
12. Historic interpretation
13. Picnicking
14. Hunting
15. Waterskiing
16. Sailing / wind surfing
17. Scuba diving
18. River cruise
19. Camping
20. RV camping
21. Waterfront attraction

STRATEGY:

Because the County does not own any waterfront property on which to develop facilities, there are three alternative avenues or strategies available to provide water-related recreation opportunities. These include acquiring property on which to develop facilities, providing programs which travel to other facilities outside the county and implementing a use agreement.

It is likely that all three strategies will need to be employed, depending heavily on programs outside the county, until sites can be acquired or use agreements implemented.

Programs have already been discussed under General Recommendations and do provide a viable, though inconvenient and in the long run, expensive, way of facilitating the most pressing needs. The programs can be established by the Parks and Recreation Department in response to a user survey and other means of demand assessment.

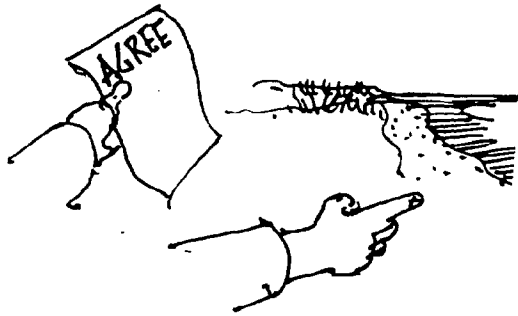
The need to monitor availability and acquire waterfront property has also been discussed under General Recommendations. One strategy for land acquisition would be the formation of a parks and recreation foundation which could receive tax-free gifts of land or money on and with which facilities could be developed. The foundation could raise money and have it ready to acquire property as it becomes available, thus reducing missed opportunities.

Property acquisition is the ultimate solution, but will be a long-term project. However, it doesn't mean it can be put off. Acquisition should be the highest priority in implementation strategies.

Use agreements can be thought of as both immediate and mid-term solutions to providing facilities, although, agreements such as resource protection easements can be long-term or even perpetual.

The potential of agreement is only limited by what can be agreed upon. The following categories of land owners and potential for use agreements are discussed in descending order of potential.





State/ Federal Lands:

The potential for use agreement on state lands is very high within the limits of the resource management and program objective for the specific land in question. This should be one of the first areas of negotiation for use agreements.

Civic Organizations:

Civic organizations also have a high potential to enter use agreements for reasons already presented.

Agreements with Business/ Industry:

This strategy and potential is basically limited to one company, Virginia Power. Recreational potential of the Virginia Power site has been discussed in the area opportunity section and is thought to be high.

Private Land/ Timber Company:

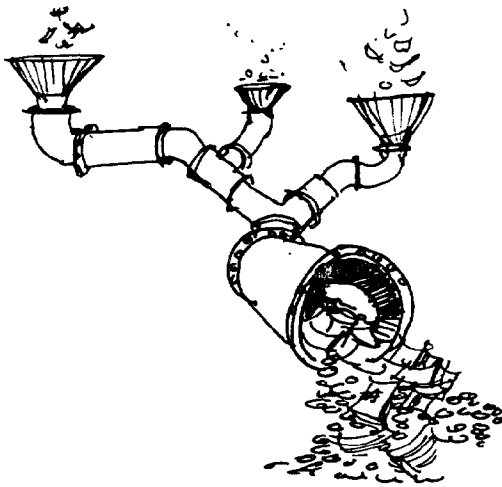
If the issues of liability and maintenance can be satisfactorily addressed, negotiation for use agreements is thought to be potentially productive. These would likely be short-to mid-term agreements with termination clauses so as not to encumber the sale of property.

Agreements with Homeowners' Associations:

This strategy would vary from community to community depending upon the attitude of property owners and community leaders. The county could offer other incentives such as reduced taxes, assistance with improving and monitoring facilities, etc. which might make agreements attractive. Limitations on the amount and time public use is allowed may also make an agreement more likely. Issuance of passes and permits, limiting the number of people using the facilities, may also make the idea more acceptable.

Private Land Owners:

Any agreements with private land owners are likely to be in the area of resource protection easements rather than agreements which allow the public onto their property. The larger the tract of land and the lesser the use, the more likely an agreement. However, some very civic-minded individuals who support recreation do exist and may be willing to enter into a use agreement.



FUNDING

Providing waterfront recreational opportunities in Surry County will require some creative thinking and action in acquiring funds for implementation of such facilities. The success of funding such improvements will partly be determined by the willingness of county residents to absorb, either directly or indirectly, the cost of building and maintaining these facilities. On the other hand, there are sources outside of the county for obtaining funds for these proposed projects.

There are several state funding programs which could help serve the waterfront recreational needs of Surry County, among them the Virginia Outdoors Fund (VOF). The VOF is administered by the Department of Conservation and Recreation Division of Planning and Recreation Resources (DPRR). Monies are allocated for specific qualifying projects with special consideration for those agencies not having previously received DPRR assistance. The VOF encourages the rehabilitation of older parks and facilities, the gifts of lands, the utilization of private capital, and the utilization of existing resources.

The Chesapeake Bay Youth Conservation Corps. (CBYCC) is a program administered by the Virginia Division of Planning and Recreation Resources with the goal of improving the overall quality of the environment of the Chesapeake Bay. Through the employment of mostly economically disadvantaged youth (ages 16-21 years of age), this program is labor-oriented and sponsors projects, such as shoreline stabilization and erosion control, which focus mainly on waterfront access.

The recreational access program of VDOT was designed to provide adequate access to or within publicly developed recreational areas of historic sites operated by the Commonwealth of Virginia, or by a local government or authority. Construction, reconstruction, maintenance, and improvement of road and bikeways are eligible for recreational-access funding. All roads must be designated as scenic highways or Virginia byways.

The following are potential funding sources:

County Government/ Local Sources

- **Operating Budget:**
An appropriation by the county government from the county operating budget specifically for the use in the development of recreation areas and access.
- **Capital Improvements Budget:**
The county proposes the borrowing of money through the sale of bonds. The money will be paid back in the future, either through direct appropriations from the county budget or a portion of some dependable source of income, such as taxes on certain items.
- **Bonds:**
Monies borrowed by the county by selling bonds which will be paid off in the future either through direct appropriations from the general fund or through portions of taxes, fees, etc.
- **Special Assessments:**
Special taxes or fees assessed to specific items (i.e. property).
- **Proffers:**
Lands or monies received from developers in exchange for special development considerations and conditioned rezoning.
- **Fines:**
Fines or portions of fines imposed upon violations of various county laws and ordinances used for recreational purposes.
- **Landfill Tipping Fee:**
Fees levied by the county government on users of the county landfill.
- **Recycling Proceeds:**
Percentage of potential recycling fees collected by the county landfill to be earmarked for recreational activities/ areas and access.
- **Property Taxes:**
Additional taxes assessed on the property owners of the county or an additional portion of existing taxes.

- **Income Taxes:**
Additional income taxes levied by the county government for the specific purpose of allocating the monies for recreational purposes.
- **Sales Taxes:**
Selective sales taxes on items used by the users of recreational areas (i.e. sporting goods/ equipment).
- **Franchise Taxes:**
Charges assessed on individual businesses or business types with the express intent of supplementing recreational needs.
- **Dedication Ordinances:**
Spaces or access routes within given lots or developments which are dedicated or conveyed to the county for appropriate recreational uses.
- **Land Leases:**
Portions of money accumulated from the rental of county owned lands.
- **Facility Rentals:**
Portion of fees collected for the rental of county-owned facilities/ equipment.
- **Loans:**
Monies borrowed from groups or individuals specifically to be used for recreational purposes.
- **Cigarette Tax:**
A portion of local taxes levied on the sales of tobacco products.
- **Motel Tax:**
Use of a portion of local hotel tax proceeds for the development of recreational areas and access to recreational areas.

County Parks & Recreation Sources:

- **User fees and Charges:**
Entrance fees, admission fees, rental fees, user fees, license/permit fees, special service fees, etc. (specifically related to recreational uses).
- **Concessions:**
Monies garnered through the sales of goods and services at recreational areas.

- Interest on Investments:
Interests accumulated on investments held by the Parks and Recreation Department.
- Leases:
Monies accrued from the use of Parks and Recreation facilities by individuals or other organizations.
- Facilities Surcharges:
Fees added to the usual amount charged for the use of parks and recreation facilities.
- Operations Surcharges:
Fees added to the usual amount charged for the use of Parks and Recreation facilities.

State and Federal Government

- Virginia Outdoors Fund (VOF):
Monies are allocated for specific qualifying projects, especially those which utilize existing resources and the rehabilitation of existing facilities and which emphasize the greatest participation by the maximum number of people. Administered by the Department of Conservation and Recreation's Division of Planning and Recreation Resources (DPRR).
- Department of Game and Inland Fisheries:
In the fiscal year beginning July 1993, two grants will be awarded to local jurisdictions for the purpose of water access.
Contact:
Land and Engineering Division
Commonwealth of Virginia
Department of Game and Inland Fisheries
4010 West Broad Street
Richmond, Virginia 23230
- Virginia Department of Transportation(VDOT)
Recreational Access Program:
The recreational access program has an annual appropriation of funds from the highway portion

of the transportation trust fund designated by the commonwealth's transportation board for recreational access projects for construction, reconstruction, maintenance, and improvement of roads and bikeways.

Contact:
Waverly Residency
Commonwealth of Virginia
Department of Transportation
P. O. Box 45
Waverly, Virginia 23890

Corporations

- Gifts:
Monies or lands given to the county by corporations for the specific intent of providing meeting recreational needs.
- Grants:
The transfer of property from private corporations to the county for the specific intent of meeting recreational needs.
- Sponsorships:
Monies and/ or lands given to the county by corporations for the express intent of meeting recreational needs in exchange for some sort of recognition for supporting the program.

Private Individuals

- Gifts:
Monies or lands given to the county by private individuals for the specific intent of meeting recreational needs.
- Grants:
The transfer of property from private individuals to the county for the specific intent of meeting recreational needs.
- Sponsorships:
Monies and/or lands given to the county by private individuals for the express intent of meeting recreational needs in exchange for some sort of recognition for supporting the program.

- Loans:
Monies lent to the county by private individuals for the specific intent of meeting recreational needs. Monies are all to be paid back in the future.

Foundations

- Gifts:
Monies or lands given to the county by foundations for the specific intent of meeting recreational needs.
- Grants:
The transfer of property to the county from foundations for the specific intent of meeting recreational needs.
- Loans:
Monies lent to the county by foundations for the specific intent of meeting recreational needs. Monies are all to be paid back in the future.
- Sponsorships:
Monies and/ or lands given to the county by foundations for the express intent of meeting recreational needs in exchange for some sort of recognition for supporting the program.

Civic Organizations

- Donations:
Monies and/ or property contributed to the county for the express purpose of meeting recreational needs.

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